Liebert
Keeping Business in Business™

SiteScan

IGM Reference Document

Including Modbus and BACnet object Listings

EMERSON™
Network Power

This reference document is based on the assumption that the connecting unit is SiteScan 2000 ready and is using the SiteScan 2000 hardware specified within.

Revision Level Updates:

Revision	Date	Description
B.5	11/8/00	Added: revision level update chart, HiPulse support, and NPower support
B.6	2/19/01	Revised NPower definition
B.7	4/4/02	Added support for HiMod LNA
B.8	5/3/02	Revised Modbus explanation (Hi Byte / Lo Byte)
B.9	10/1/02	Corrected NPower table (typing error)
B.10	1/22/03	Added support for DataMate

Table of Contents

Click on the desired page number for instant navigation. Use the "back" arrow on your toolbar to return to the table of contents.

OPEN COMMUNICATIONS 7

Default Mapping for Modbus & BACnet Objects 7
Modbus Communications 9
Connectivity to SiteLink modules using Modbus 9
Implementation Basics 9
Transmission Format 9
Modbus Packet Format 10
RTU Framing 11
BACnet Communications 12
BACnet Protocol Implementation Conformance Statement Rev. 2.1 12

LIEBERT ENVIRONMENTAL UNITS 16

Air Unit - Level 0 – L00 17
Air Unit – Level 10 – L10 19
Air Unit – Standard Microprocessor – LSM 21
Air Unit – Advanced Microprocessor – LAM 23
Air Unit – Small Systems – L0B 26
Air Unit – Mini-Mate 2 – MM2, DataMate 28
Air Unit – 8 Ton MiniMate – L8T 31
Atlas Air Unit – C10 34
Chiller Unit – CSU3000 – CSU 37
Chiller Unit – CSU 3000 w/Econo – CSE 39
Air Unit - Hiross Microface 41

LIEBERT POWER UNITS 46

Power Unit – Voltage- Current Monitoring Panel – VCM 47
Power Unit – Power Monitoring Panel – PMP 49
Power Unit – Voltage-Current-Freq. Monitor Panel – VCF 52
Power Unit – Power Monitoring Panel (Ext. Protocol) – PM2 54
Power Unit – Static Transfer Switch PDU – EDS 57
Power Unit – Static Transfer Switch PDU Dual Output – STS 60

LIEBERT UPS UNITS 63

UPS Unit – Multi Module UPS – S600 Extended Prot. – MM4 64
UPS Unit – Multi Module Series – MMS 67
UPS Unit – System Control Cabinet – S600 Ext. Prot. – SC4 69
UPS Unit – System Control Cabinet – SCC 72
UPS Unit – Single Module Series – SMS 74
UPS Unit – Single Module UPS – S600 Ext. Prot. – SM4 76
UPS Unit – Multi-Module SICE 7200 & HiPulse UPS – SMM 80
UPS Unit – Systems Cabinet SICE 7200 UPS – SSC 85
UPS Unit – Single Module SICE 7200 & HiPulse UPS – SSM 89

UPS UNIT – UPSTATION S – DCU 94
UPS UNIT – UPSTATION S3 – US3 97
UPS UNIT – SINGLE MODULE SERIES AP301/302 – SM3 100
UPS UNIT – SINGLE MODULE UPS – NPOWER -- IMP 103

LIEBERT MONITORING MODULES 108

CONTACT CLOSURE MODULE – CCM 109
WATER/LIQUID DETECTION UNIT – WDU 112
REMOTE AUTOCHANGEOVER – RAC 113
TEMPERATURE/HUMIDITY MODULE – THM 115

How to use the Reference Library Charts

This document contains a dedicated sheet for each Liebert Unit and associated controller. The title of each chart contains the name of the Liebert Controller used such as L00 for a Level-0 Air unit or PMP for a Power Monitoring Panel for Power Center.

The first section, Compatible Hardware, indicates the equipment associated with this particular controller as follows:

Liebert Units	Indicates the Environmental, Power, UPS or Monitoring Module by model name that uses this controller.
SiteScan Interface Modules	Indicates which SiteScan Hardware Modules can be used with the controller. Take Special note of this box when adding new units to an existing SiteScan system, as some new controllers are only compatible with the new hardware (SiteLink).
BMS interface Modules	Indicates which SiteScan Hardware Modules can be used with the controller for interfacing with a third part using BACnet or Modbus protocol.

The next section, Available Points, contains six categories providing the following information:

Status Points (View)	Status Information for the listed points that will be presented in SiteScan
Alarm Points	Alarms that are available to SiteScan
Setpoints (View)	Current settings of controllable Setpoints available to SiteScan
Control Points (Set)	Setpoints that can be changed with SiteScan
Trendable Points (Set)	Points that can be graphically trended within the SiteScan software
Reports	Reports that can be triggered within the SiteScan software

Liebert Unit ID Chart

3-Letter ID	Environmental Products	3-Letter ID	UPS Products
L00	Level 00, Level 1	SMS	Single Module Series UPS - S300, S500, S600 (Prior to 1/98)
L10	Level 2, Level 3, and Level 10	SM3	Single Module Series 30x (latest version)
LAM	Level 15 and Level AM/AG, HiMod (LNA)	SM4	Single Module Series 600 - Extended Protocol (1/98 or later)
LSM	Level SM and Level 0 w/ On/Off Control	US3	UPStation S3 UPS
L0B	Small Systems Controller	MMS	Multi Module Series 500-600 UPS (Prior to 1/98)
MM2	Small Systems Controller - Mini Mate II, DataMate	MM4	Multi Module Series 600 UPS - Extended Protocol (1/98 or later)
C10	Atlas Air Environmental Control (LECS15)	SCC	System Control Cabinet Series 500-600 (Prior to 1/98)
CSE	Chiller w/ Econocoil	SC4	System Control Cabinet Series 600-Extended Protocol (1/98 or later)
CSU	Chiller	SSM	Single Module Series UPS - SICE 7200 & HiPulse
		SMM	Multi Module Series UPS - SICE 7200 & HiPulse
	Static Switch PDU	SSC	System Control Cabinet - SICE 7200
EDS	Static Switch PDU (Single Output Breaker, Prior to 1/99)	IMP	NPower (S300 Replacement)
STS	Static Switch PDU (Dual Output Breaker Option, 1/99 or later)		**Power Products PDU**
		PMP	Precision Power & Datawaves w/ PMP (latest LCD display)
	Miscellaneous	VCF	All Voltage-Current-Frequency Panels (Old Red LED Display)
CCM	All IGM Contact Modules CM200 / RCM8 / VSM	VCM	All Voltage-Current Monitoring Panels (Old Red LED Display)
RAC	Remote Autochangeover Module - RAC2-8	PM2	Precision Power & Datawaves w/ PMP (latest LCD display and extended protocol EPROM version 3.290.0, manufactured and shipped after 4/99)
THM	Temperature / Humidity Module		
WDU	Liquid Detection LDS750 or LDS1000		

Open Communications

Default Mapping for Modbus & BACnet Objects

This model represents the standard configuration for a Liebert Sitelink-12 module. Consecutive register / object mapping is utilized, regardless of the SiteLink-12 population. All ports that do not have a Liebert IGM attached will be assigned "null values" (or zero's) for their corresponding registers. The default “slave ID” or “Device ID” follows the CMnet address of the unit. The address can be visually checked by looking at the address dip-switch or rotary switch settings. However, the address can be changed in software to suit specific needs.

How to use this table:

The unit or model specific reference sheets assumes that the desired unit is attached to port 1 of the SiteLink module. If the desired unit is attached to a different port, the table below indicates the starting register or object number for the unit.

For example: The register for “temperature” for a L00 type unit attached to port 1 is identified as 40001. If an additional L00 type unit were attached to port 2, the “temperature” value would be located in register 40025. The same type unit attached to port 3 = 40049…etc.

Modbus Notes:

- Modbus Registers start at 40001.
- All registers are unsigned integers.

BACnet Notes:

- BACnet Objects start at 1.
- All “Status” and “Alarm” objects are “AI’s” (analog inputs).
- The “Control” objects are “AO’s” (analog outputs)

Register Offset	Object Type	Port Assignment
1-24	Status	1
25-48	Status	2
49-72	Status	3
73-96	Status	4
97-120	Status	5
121-144	Status	6
145-168	Status	7
169-192	Status	8
193-216	Status	9
217-240	Status	10
241-264	Status	11
265-288	Status	12
289-293	Alarms	1
294-298	Alarms	2
299-303	Alarms	3
304-308	Alarms	4
309-313	Alarms	5
314-318	Alarms	6
319-323	Alarms	7
324-328	Alarms	8
329-333	Alarms	9
334-338	Alarms	10
339-343	Alarms	11
344-348	Alarms	12
349-351	Control	1
352-354	Control	2
355-357	Control	3
358-360	Control	4
361-363	Control	5
364-366	Control	6
367-369	Control	7
370-372	Control	8
373-375	Control	9
376-378	Control	10
379-381	Control	11
382-384	Control	12

** See reference libraries for unit specific objects.

Modbus Communications

Connectivity to SiteLink modules using Modbus

This design specification describes the Modbus communications protocol as supported by the SiteLink module. It includes information on how to pass information to and from the SiteLink module via Modbus. It is also intended to help facilitate answering questions regarding supported types, frame format, function code support etc.

Implementation Basics

Protocol controls the language structure or message format between devices in other words, the rules for communication. The rules for communication include how master and slave devices initiate communications, as well as unit identification, message handling and error checking. Modbus protocol simply refers to the control of the query and response cycles between master and slave devices.
The SiteLink module is configured to act as a slave device on a common network. The common network can be point-to-point over EIA-232, where one master communicates to one slave device or in a multi-drop configuration over EIA-485, where multiple slaves reside on a common wire or loop.

Transmission Format

The SiteLink module supports both Modbus RTU (**R**emote **T**erminal **U**nit) and ASCII (**A**merican **S**tandard **C**ode for **I**nformation **I**nterchange) transmission modes. The SiteLink module has a choice of transmission medium, baud rate, character parity and number of stop bits. See chart below.

Physical Port	Transmission Mode	Baud Rate	Data Bits	Parity Bits	Stop Bits	Default
EIA-232 – DB9 DCE	RTU	9600	8	None	1	Yes
EIA-232 – DB9 DCE	ASCII	1200 – 38.4kbd (19.2kbd omit)	Configurable	Configurable	Configurable	No
EIA-485 – 2 or 4 wire	RTU or ASCII	1200 – 38.4kbd (19.2kbd omit)	Configurable	Configurable	Configurable	No

Modbus Packet Format

Each Modbus packet consists of the following fields:

- Device Address
- Function Code
- Data Field(s)
- Error Check Field

Device Address:

The address field immediately follows the beginning of the frame and consists of 8-bits (RTU) or 2 characters (ASCII). These bits indicate the user assigned address of the slave device that is to receive the message sent by the attached master device.

Each slave must be assigned a unique address and only the addressed slave will respond to a query that contains its address.

Function Code:

The function code field tells the addressed slaves what function to perform. Function codes are specifically designed invoke a specific action by the slave device. The function code range is from 1 to 127. However, the **SiteLink module primarily uses Function Code 3 (Read Holding Registers**), **Function Code 6 (Preset Single Register) and Function Code 16 (Preset Multiple Registers)**.

Data Field(s):

The data field varies in length depending on whether the message is a request or a response to a packet. This field typically contains information required by the slave device to perform the command specified or to pass back data to the master device.

Error Check Field:

The Error Check Field consists of a 16-bit (2 byte) Cyclical Redundancy Check (CRC16). It allows the receiving device to detect a packet that has been corrupted with transmission errors.

RTU Framing

The example below shows a typical Q/R from a SiteLink module. In common terms, the master device initiates a query asking **slave device 2** for **holding registers** starting at **holding register 40051** (decimal 50) and including next **2 Registers** (3 total).

Query Sample

Slave Address	Function Code	Starting Register "Hi Byte"	Starting Register "Lo Byte"	Number of Registers "Hi Byte"	Number of Registers "Lo Byte"	CRC16 "Hi Byte"	CRC16 "Lo Byte"
02	03	00	32	00	03	E5	FA

Response Sample

Slave Address	Function Code	Count: Bytes of Data	Register 40051 Data Hi	Register 40051 Data Lo	Register 40052 Data Hi	Register 40052 Data Lo	Register 40053 Data Hi	Register 40053 Data Lo	CRC16 "Hi Byte	CRC16 "Lo Byte"
02	03	6	01	58	00	FA	00	54	1B	0D

Slave address 2 responds to Function Code 3 with 6 bytes of hexadecimal data and ends with CRC16 checksum.

Register values: 40051 = 158(hex) = 344(decimal)
40052 = FA (hex) = 250 (decimal)
40053 = 54 (hex) = 84 (decimal)

ASCII Framing:

Framing in ASCII transmission mode is accomplished by the use of the unique colon (:) to indicate the beginning of the frame and a carriage return (CR) line feed (LF) to delineate the end of the frame. The line feed also serves as a synchronizing character which indicates that the transmitting station is ready to receive an immediate reply.

ASCII Example

Frame Start	Slave Address	Function Code	Data	Error Check	End of Frame CR	Ready for Data LF	
:	2 Char 16-bits	2 Char 16-bits	N x 4 Char N x 16-bits	B3	0D	0A	

Char = Character: 1 Character = 7 data bits, 1 start bit, 1 or 2 stop bits and 1 parity bit (optional)

BACnet Communications

BACnet Protocol Implementation Conformance Statement

Rev. 2.1

Vendor Name: Liebert Corporation

Product Name: SiteLink Module

Product Model Number: SiteLink-DC12i, SiteLink-DC4i, SiteLink-12, and SiteLink-4

Product Description:

The SiteLink module provides a BACnet Point-to-Point communication exchange between proprietary Liebert Environmental, Power, UPS units to other BACnet compliant devices. The connection to the SiteLink module is via EIA-232, 9600 baud, no parity, 8 data bits, 1 stop bit (9600,N,8,1 default.) The SiteLink modules are available in 12 port and 4 port configurations (i.e. 1 port per/ Liebert Unit, 12 Liebert units per/ SiteLink module maximum.)

BACnet Conformance Class Supported:

Class 1		Class 4	
Class 2		Class 5	
Class 3	**x**	Class 6	

BACnet Functional Groups Supported:

Clock		Files	
HHWS		Reinitialize	
PCWS		Virtual Operator Interface	
Event Initialization		Virtual Terminal	
Event Response		Device Communications	
COV Event Initiation		Time Master	
COV Event Response			

BACnet Standard Application Services Supported:

Application Service	Initiate Requests	Execute Requests
AcknowledgeAlarm		
ConfirmedCOVNotification		
ConfirmedEventNotification		
GetAlarmSummary		
GetEnrollmentSummary		
SubscribeCOV		
UnconfirmedCOVNotification		
UnconfirmedEventNotification		
AtomicReadFile		
AtomicWriteFile		
AddListElement		
RemoveListElement		
CreateObject		
DeleteObject		
ReadProperty	**X**	**X**
ReadPropertyConditional		
ReadPropertyMultiple		**X**
WriteProperty	**X**	**X**
WritePropertyMultiple		**X**
DeviceCommunicationControl		
ConfirmedPrivateTransfer		
UnconfirmedPrivateTransfer		
ReinitializeDevice		
ConfirmedTextMessage		
TimeSynchronization		
Who-Has		**X**
I-Have	**X**	
Who-Is		**X**
I-Am	**X**	
VT-Open		
VT-Closed		
VT-Data		
Authenticate		
Request Key		

BACnet Standard Application Services Supported (continued):

Object Type	Supported	Dynamically Creatable	Dynamically Deleteable	Optional Properties	Writable Properties
Analog Input	**X**				**None**
Analog Output	**X**				**Present Value**
Analog Value					
Binary Input					
Binary Output					
Binary Value					
Calendar					
Command					
Device					
Event Enrollment					
File					
Group					
Loop					
Multi-State Input					
Multi-State Output					
Notification Class					
Program					
Schedule					

Data Link Layer:

Point-to-Point, EIA-232, baud rates: 9600 & 38,400

Character Set Supported:

ANSI X3.4

Special Functionality:

Segmented Requests Supported	**No**
Segmented Responses Supported	**No**
Router	**No**

Liebert Environmental Units

Air Unit - Level 0 – L00

Hardware Compatibility	
Liebert Units:	Challenger 3, Logicool, Modular Plus, LS400, Mini-Tower, System 4
SiteScan Interface Modules:	DC-1; DC4; DC12; SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature	40001	1	
Humidity	40002	2	
Cooling	40003	3	1=on / 0=0ff
Heating	40004	4	1=on / 0=0ff
Humidification	40005	5	1=on / 0=0ff
Dehumidification	40006	6	1=on / 0=0ff
Econ-o-Cycle	40007	7	1=on / 0=0ff
Stages	40008	8	
% Capacity	40009	9	
Alarm Points			
Communications	40289:0	289:0	
High Head Pressure 1	40289:1	289:1	
High Head Pressure 2	40289:2	289:2	
Loss of Airflow	40289:3	289:3	
Liquid Detected	40289:4	289:4	
Change Filters	40289:5	289:5	
High Temperature	40289:6	289:6	
Low Temperature	40289:7	289:7	
High Humidity	40289:8	289:8	
Low Humidity	40289:9	289:9	
Local Alarm	40289:10	289:10	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Setpoints (View)			
Temperature Setpoint	40010	10	
Temperature Tolerance	40011	11	
Humidity Setpoint	40012	12	
Humidity Tolerance	40013	13	
Control Points (Set)			
Temperature Setpoint	40350	350	
Temperature Tolerance	40350	350	Multiply desired value by 1000
Humidity Setpoint	40351	351	
Humidity Tolerance	40351	351	Multiply desired value by 1000
Trendable points (Set)			
Temperature			
Humidity			
Reports			
Trend			
Status			

Air Unit – Level 10 – L10

Hardware Compatibility	
Liebert Units:	Modular Plus, Deluxe System/3, Industrial Cooling Series
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature	40001	1	
Humidity	40002	2	
Cooling	40003	3	1=on / 0=0ff
Heating	40004	4	1=on / 0=0ff
Humidification	40005	5	1=on / 0=0ff
Dehumidification	40006	6	1=on / 0=0ff
Econ-o-Cycle	40007	7	1=on / 0=0ff
Stages	40008	8	
% Capacity	40009	9	
Alarm Points			
Communications	40289:0	289:0	
High Head Pressure 1	40289:1	289:1	
High Head Pressure 2	40289:2	289:2	
Loss of Airflow	40289:3	289:3	
Standby Glycol Unit On	40289:4	289:4	
Liquid Detected	40289:5	289:5	
Change Filters	40289:6	289:6	
High Temperature	40289:7	289:7	
Low Temperature	40289:8	289:8	
High Humidity	40289:9	289:9	
Low Humidity	40289:10	289:10	
Humidifier Problem	40290:0	290:0	
No Water in Humidifier Pan	40290:1	290:1	
Compressor 1 Overload	40290:2	290:2	
Compressor 2 Overload	40290:3	290:3	
Main Fan Overload	40290:4	290:4	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Manual Override	40290:5	290:5	
Smoke Detected	40290:6	290:6	
Loss of Water	40290:7	290:7	
Standby Unit On	40290:8	290:8	
Low Suction	40290:9	290:9	
Short Cycle	40290:10	290:10	
Loss of Power	40291:0	291:0	
Inverter Bypass	40291:1	291:1	
Standby Fan On	40291:2	291:2	
Loss of Emergency Power	40291:3	291:3	
Local Alarm 1	40291:4	291:4	
Local Alarm 2	40291:5	291:5	
Setpoints (View)			
Temperature Setpoint	40010	10	
Temperature Tolerance	40011	11	
Humidity Setpoint	40012	12	
Humidity Tolerance	40013	13	
High Temperature Setpoint			
Low Temperature Setpoint			
High Humidity Setpoint			
Low Humidity Setpoint			
Control Points (Set)			
Temperature Setpoint			
Temperature Tolerance			Multiply desired value by 1000
Humidity Setpoint			
Humidity Tolerance			Multiply desired value by 1000
Trendable Points (Set)			
Temperature			
Humidity			
Reports			
Trend			
Status			

Air Unit – Standard Microprocessor – LSM

Hardware Compatibility	
Liebert Units:	Challenger 3000. Deluxe System / 3, ICS , System 4 (Replaces L0A control)
SiteScan Interface Modules:	DC-1; DC4-422; DC12-422; SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature	40001	1	
Humidity	40002	2	
Cooling	40003	3	1=on / 0=0ff
Heating	40004	4	1=on / 0=0ff
Humidification	40005	5	1=on / 0=0ff
De-humidification	40006	6	1=on / 0=0ff
Econ-O-Cycle	40007	7	1=on / 0=0ff
Stages	40008	8	
% Capacity	40009	9	
Unit Status (On / Off)	40014	14	1=on / 0=0ff
Alarm Points			
Communications	40289:0	289:0	
Local Off	40289:1	289:1	
Remote Off	40289:2	289:2	
High Head Pressure 1	40289:3	289:3	
High Head Pressure 2	40289:4	289:4	
Loss of Airflow	40289:5	289:5	
Liquid Detected	40289:6	289:6	
Change Filters	40289:7	289:7	
High Temperature	40289:8	289:8	
Low Temperature	40289:9	289:9	
High Humidity	40289:10	289:10	
Low Humidity	40290:0	290:0	
Local Alarm	40290:1	290:1	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Setpoints (View)			
Temperature Setpoint	40010	10	
Temperature Tolerance	40011	11	
Humidity Setpoint	40012	12	
Humidity Tolerance	40013	13	
Control Points (Set)			
Unit On / Off	40349		
Temperature Setpoint	40350		
Temperature Tolerance	40350		Multiply desired value by 1000
Humidity Setpoint	40351		
Humidity Tolerance	40351		Multiply desired value by 1000
Trendable Points (Set)			
Temperature			
Humidity			
Reports			
Trend			
Status			

Air Unit – Advanced Microprocessor – LAM

Hardware Compatibility	
Liebert Units:	Challenger 3000. Deluxe System / 3, ICS , System 4 (Replaces L15 & L1A) HiMod (LNA version)
SiteScan Interface Modules:	DC-1; DC4-422; DC12-422; SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature	40001	1	
Humidity	40002	2	
Cooling	40003	3	1=on / 0=0ff
Heating	40004	4	1=on / 0=0ff
Humidification	40005	5	1=on / 0=0ff
De-humidification	40006	6	1=on / 0=0ff
Econ-O-Cycle	40007	7	1=on / 0=0ff
Stages	40008	8	
% Capacity	40009	9	
Unit Status (On / Off)	40018	18	1=on / 0=0ff
Alarm Points			
Communications	40289:0	289:0	
Local Off	40289:1	289:1	
Remote Off	40289:2	289:2	
High Head Pressure 1	40289:3	289:3	
High Head Pressure 2	40289:4	289:4	
Loss of Airflow	40289:5	289:5	
Standby Glycol Unit On	40289:6	289:6	
Liquid Detected	40289:7	289:7	
Change Filters	40289:8	289:8	
High Temperature	40289:9	289:9	
Low Temperature	40289:10	289:10	
High Humidity	40290:0	290:0	
Low Humidity	40290:1	290:1	
Humidifier Problem	40290:2	290:2	
No Water in Humidifier Pan	40290:3	290:3	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Compressor 1 Overload	40290:4	290:4	
Compressor 2 Overload	40290:5	290:5	
Main Fan Overload	40290:6	290:6	
Manual Override	40290:7	290:7	
Smoke Detected	40290:8	290:8	
Loss of Water	40290:9	290:9	
Standby Unit On	40290:10	290:10	
Low Suction	40291:0	291:0	
Short Cycle	40291:1	291:1	
Loss of Power	40291:2	291:2	
Inverter on Bypass	40291:3	291:3	
Standby Fan On	40291:4	291:4	
Loss of Emergency Power	40291:5	291:5	
Local Alarm 1	40291:6	291:6	
Local Alarm 2	40291:7	291:7	
RunTimes (View)			
Compressor 1 Run Hours	40019	19	
Compressor 2 Run Hours	40020	20	
Glycol Run Hours			
Fan Motor Run Hours	40021	21	
Humidifier Run Hours	40022	22	
Reheat 1 Run Hours			
Reheat 2 Run Hours			
Reheat 3 Run Hours			
Chilled Water Valve Run Hours			
Setpoints (View)			
Temperature Setpoint	40010	10	
Temperature Tolerance	40011	11	
Humidity Setpoint	40012	12	
Humidity Tolerance	40013	13	
High Temperature Alarm Setpoint	40014	14	
Low Temp Alarm Setpoint	40015	15	
High Humidity Alarm Setpoint	40016	16	
Low Humidity Alarm Setpoint	40017	17	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Control Points (Set)			
Unit On / Off	40349	49	Bit 0 on=unit off Bit 1 on=unit on
Temperature Setpoint	40350	50	
Temperature Tolerance	40350	50	Multiply desired value by 1000
Humidity Setpoint	40351	51	
Humidity Tolerance	40351	51	Multiply desired value by 1000
Reheat Lockout	40349	49	Bit 2 on=RH off Bit 3 on=RH on
Humidifier Lockout	40349	49	Bit 4 on=HL off Bit 5 on=HL on
Trendable Points (Set)			
Temperature			
Humidity			
Reports			
Trend			
Status			

Air Unit – Small Systems – L0B

Hardware Compatibility	
Liebert Units:	Datamate, Mini-Mate, Mini-Mate Plus
SiteScan Interface Modules:	DC-1; DC4; DC12; SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature	40001	1	
Humidity	40002	2	
Cooling	40003	3	1=on / 0=0ff
Heating	40004	4	1=on / 0=0ff
Humidification	40005	5	1=on / 0=0ff
Dehumidification	40006	6	1=on / 0=0ff
Econ-o-Cycle	40007	7	1=on / 0=0ff
Stages	40008	8	
% Capacity	40009	9	
Unit On/Off	40011	11	1=on / 0=0ff
Alarm Points			
Communications	40289:0	289:0	
Local Off	40289:1	289:1	
Remote Off	40289:2	289:2	
High Temperature	40289:3	289:3	
Low Temperature	40289:4	289:4	
High Humidity	40289:5	289:5	
Low Humidity	40289:6	289:6	
Setpoints (View)			
None			
Control Points (Set)			
Remote On/Off	40349	349	2=on / 1=off / 0=no change

SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Trendable Points (Set)			
Temperature			
Humidity			
Reports			
Trend			
Status			

Air Unit – Mini-Mate 2 – MM2, DataMate

Hardware Compatibility	
Liebert Units:	Mini-Mate 2, DataMate
SiteScan Interface Modules:	SiteLink
BMS interface Modules:	

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature	40001	1	
Humidity	40002	2	
Cooling	40003	3	1=on / 0=0ff
Heating	40004	4	1=on / 0=0ff
Humidification	40005	5	1=on / 0=0ff
Dehumidification	40006	6	1=on / 0=0ff
Econ-o-Cycle	40007	7	1=on / 0=0ff
Stages	40008	8	
% Capacity	40009	9	
Unit On/Off	40018	11	1=on / 0=0ff
Alarm Points			
Communications	40289:0	289:0	
Local Off	40289:1	289:1	
Remote Off	40289:2	289:2	
High Head Pressure 1	40289:3	289:3	
High Head Pressure 2	40289:4	289:4	
Loss of Airflow	40289:5	289:5	
Standby Glycol Unit On	40289:6	289:6	
Liquid Detected	40289:7	289:7	
Change Filters	40289:8	289:8	
High Temperature	40289:9	289:9	
Low Temperature	40289:10	289:10	
High Humidity	40290:0	290:0	
Low Humidity	40290:1	290:1	
Humidifier Problem	40290:2	290:2	
No Water in Humidifier Pan	40290:3	290:3	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Compressor 1 Overload	40290:4	290:4	
Compressor 2 Overload	40290:5	290:5	
Main Fan Overload	40290:6	290:6	
Manual Override	40290:7	290:7	
Smoke Detected	40290:8	290:8	
Loss of Water	40290:9	290:9	
Standby Unit On	40290:10	290:10	
Low Suction	40291:0	291:0	
Short Cycle	40291:1	291:1	
Loss of Power	40291:2	291:2	
Inverter Bypass	40291:3	291:3	
Standby Fan On	40291:4	291:4	
Loss of Emergency Power	40291:5	291:5	
Local Alarm 1	40291:6	291:6	
Local Alarm 2	40291:7	291:7	
Setpoints (View)			
Temperature Setpoint	40010	10	
Temperature Tolerance	40011	11	
Humidity Setpoint	40012	12	
Humidity Tolerance	40013	13	
High Temperature Alarm Setpoint	40014	14	
Low Temperature Alarm Setpoint	40015	15	
High Humidity Alarm Setpoint	40016	16	
Low Humidity Alarm Setpoint	40017	17	
Control Points (Set)			
Remote On/Off	40349	49	2=on / 1=off / 0=no change
Temperature Setpoint	40350	50	
Temperature Tolerance	40350	50	Multiply desired value by 1000
Humidity Setpoint	40351	51	
Humidity Tolerance	40351	51	Multiply desired value by 1000
Trendable Points (Set)			
Temperature			
Humidity			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Reports			
Trend			
Status			

Air Unit – 8 Ton MiniMate – L8T

Hardware Compatibility	
Liebert Units:	Minimate - 8 Ton only
SiteScan Interface Modules:	DC-1; DC4-422; SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature	40001	1	
Humidity	40002	2	
Cooling	40003	3	1=on / 0=0ff
Heating	40004	4	1=on / 0=0ff
Humidification	40005	5	1=on / 0=0ff
De-humidification	40006	6	1=on / 0=0ff
Econ-O-Cycle	40007	7	1=on / 0=0ff
Stages	40008	8	
% Capacity	40009	9	
Unit Status (On / Off)	40018	18	1=on / 0=0ff
Alarm Points			
Communications	40289:0	289:0	
Local Off	40289:1	289:1	
Remote Off	40289:2	289:2	
High Head Pressure 1	40289:3	289:3	
High Head Pressure 2	40289:4	289:4	
Loss of Airflow	40289:5	289:5	
Standby Glycol Unit On	40289:6	289:6	
Not Used	40289:7	289:7	
Change Filters	40289:8	289:8	
High Temperature	40289:9	289:9	
Low Temperature	40289:10	289:10	
High Humidity	40290:0	290:0	
Low Humidity	40290:1	290:1	
Humidifier Problem	40290:2	290:2	
Not Used	40290:3	290:3	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Not Used	40290:4	290:4	
Not Used	40290:5	290:5	
Not Used	40290:6	290:6	
Not Used	40290:7	290:7	
Smoke Detected	40290:8	290:8	
Loss of Water	40290:9	290:9	
Standby Unit On	40290:10	290:10	
Not Used	40291:0	291:0	
Short Cycle	40291:1	291:1	
Loss of Power	40291:2	291:2	
Not Used	40291:3	291:3	
Not Used	40291:4	291:4	
Not Used	40291:5	291:5	
Local Alarm 1	40291:6	291:6	
Local Alarm 2	40291:7	291:7	
Run Times (View)			
Compressor 1 Run Hours	40019	19	
Compressor 2 Run Hours	40020	20	
Glycol Run Hours			
Fan Motor Run Hours	40021	21	
Humidifier Run Hours	40022	22	
Reheat 1 Run Hours			
Reheat 2 Run Hours			
Reheat 3 Run Hours			
Chilled Water Valve Run Hours			
Setpoints (View)			
Temperature Setpoint	40010	10	
Temperature Tolerance	40011	11	
Humidity Setpoint	40012	12	
Humidity Tolerance	40013	13	
High Temperature Alarm Setpoint	40014	14	
Low Temp Alarm Setpoint	40015	15	
High Humidity Alarm Setpoint	40016	16	
Low Humidity Alarm Setpoint	40017	17	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Control Points (Set)			
Unit On / Off	40349	49	Bit 0 on=unit off Bit 1 on=unit on
Temperature Setpoint	40350	50	
Temperature Tolerance	40350	50	Multiply desired value by 1000
Humidity Setpoint	40351	51	
Humidity Tolerance	40351	51	Multiply desired value by 1000
Reheat Lockout	40349	49	Bit 2 on=RH off Bit 3 on=RH on
Humidifier Lockout	40349	49	Bit 4 on=HL off Bit 5 on=HL on
Trendable Points (Set)			
Temperature			
Humidity			
Reports			
Trend			
Status			

Atlas Air Unit – C10

Hardware Compatibility	
Liebert Units:	Atlas Air; LECS 15
SiteScan Interface Modules:	DC-1; DC4-422; DC12-422; SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Unit Number	40001	1	
Average Return Air Temp.	40002	2	
Average Return Air Humidity	40003	3	
Average Supply Air Temp.	40004	4	
Average Supply Air Humidity	40005	5	
Activation Mode	40006	6	
Fan Status	40007	7	
Cool 1 Status	40008	8	
Cool 2 Status	40009	9	
Heat 1 Status	40010	10	
Heat 2 Status	40011	11	
Humidifier Status	40012	12	
De-humidifier Status	40013	13	
Cooling Capacity	40014	14	
Heating Capacity	40015	15	
Active Operation (Days)			
Active Operation (Hours)			
Cool Mode (Days)			
Cool Mode (Hours)			
Heat Mode (Days)			
Heat Mode (Hours)			
Humidifier Mode (Days)			
Humidifier Mode (Hours)			
De-humidifier Mode (Days)			
De-humidifier Mode (Hours)			
Cool 1 Operating Mode (Days)			
Cool 1 Operating Mode (Hours)			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Cool 2 Operating Mode (Days)			
Cool 2 Operating Mode (Hours)			
Fan Operation (Days)			
Fan Operation (Hours)			
Heat 1Operating Mode (Days)			
Heat 1Operating Mode (Hours)			
Heat 2 Operating Mode (Days)			
Heat 2 Operating Mode (Hours)			
Humidify Operating Mode (Days)			
Humidity Operating Mode (Hours)			
Cool Service (Days)			
Cool Service (Hours)			
Filter Service (Days)			
Filter Service (Hours)			
Humidifier Service (Days)			
Humidifier Service (Hours)			
Temperature Control Status	40019	19	
Battery Voltage Level	40020	20	
Remote Shutdown Status	40021	21	
General Alarm Status	40022	22	
Audible Alarm Status	40023	23	
Temperature Control Select	40024	24	
Alarm Points			
Communications	40289:0	289:0	
Faulty Sensor	40289:1	289:1	
High Temperature	40289:2	289:2	
Low Temperature	40289:3	289:3	
High Humidity	40289:4	289:4	
Low Humidity	40289:5	289:5	
Loss of Airflow	40289:6	289:6	
Water Under Floor	40289:7	289:7	
Cool 1 Low Pressure Alarm	40289:8	289:8	
Cool 2 Low Pressure Alarm	40289:9	289:9	
Cool 1 High Pressure Alarm	40289:10	289:10	
Cool 2 High Pressure Alarm	40290:0	290:0	
Cool Service	40290:1	290:1	
Humidifier Service	40290:2	290:2	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Filter Service	40290:3	290:3	
Humidity Low Level	40290:4	290:4	
Battery Level Low	40290:5	290:5	
Loss of Power	40290:6	290:6	
Spare 1	40290:7	290:7	
Spare 2	40290:8	290:8	
Setpoints (View)			
Unit Status (On / Off)			
Return Air Temperature	40016	16	
Return Air Humidity	40017	17	
Supply Air Temperature	40018	18	
High Temperature Alarm			
Low Temperature Alarm			
High Humidity Alarm			
Low Humidity Alarm			
Start up Delay			
Control Points (Set)			
Unit Status (On / Off)			
Return Air Temperature	40349	349	
Return Air Humidity	40350	350	
Supply Air Temperature	40351	351	
High Temperature Alarm			
Low Temperature Alarm			
High Humidity Alarm			
Low Humidity Alarm			
Start up Delay			
Trendable Points (Set)			
Average Return Air Temp.			
Average Return Air Humidity			
Average Supply Air Temp.			
Average Supply Air Humidity			
Reports			
Trend			
Status			

Chiller Unit – CSU3000 – CSU

Hardware Compatibility	
Liebert Units:	Chiller CSU-3000
SiteScan Interface Modules:	DC-1; DC4-422; DC12-422; SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Number of Modules	40001	1	
Module 1 Start	40002	2	1=START / 0=STOP
Module 1 Pump	40003	3	1=ON / 0=OFF
Module 1 Cool	40004	4	1=ON / 0=OFF
Module 2 Start	40005	5	
Module 2 Pump	40006	6	1=ON / 0=OFF
Module 2 Cool	40007	7	1=ON / 0=OFF
Module 3 Start	40008	8	1=START / 0=STOP
Module 3 Pump	40009	9	1=ON / 0=OFF
Module 3 Cool	40010	10	1=ON / 0=OFF
Alarm Points			
Communications	40289:0	289:0	
Module 1 High Head Pressure	40289:1	289:1	
Module 2 High Head Pressure	40289:2	289:2	
Module 3 High Head Pressure	40289:3	289:3	
Module 1 No Water Flow	40289:4	289:4	
Module 2 No Water Flow	40289:5	289:5	
Module 3 No Water Flow	40289:6	289:6	
Module 1 High Water Temp.	40289:7	289:7	
Module 2 High Water Temp.	40289:8	289:8	
Module 3 High Water Temp.	40289:9	289:9	
Module 1 Low Water Temp.	40289:10	289:10	
Module 2 Low Water Temp.	40290:0	290:0	
Module 3 Low Water Temp.	40290:1	290:1	
Module 1 No Power	40290:2	290:2	
Module 2 No Power	40290:3	290:3	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Module 3 No Power	40290:4	290:4	
Module 1 Liquid Detected	40290:5	290:5	
Module 2 Liquid Detected	40290:6	290:6	
Module 3 Liquid Detected	40290:7	290:7	
Local Alarm 1	40290:8	290:8	
Local Alarm 2	40290:9	290:9	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
None			
Reports			
Status			

Chiller Unit – CSU 3000 w/Econo – CSE

Hardware Compatibility	
Liebert Units:	Chiller CSU-3000
SiteScan Interface Modules:	DC-1; DC4-422; SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
System Econ-o-Cycle	40001	1	1=ON / 0=OFF
Number of Modules	40002	2	
Module 1 Start	40003	3	1=START / 0=STOP
Module 1 Pump	40004	4	1=ON / 0=OFF
Module 1 Cool	40005	5	1=ON / 0=OFF
Module 2 Start	40006	6	1=START / 0=STOP
Module 2 Pump	40007	7	1=ON / 0=OFF
Module 2 Cool	40008	8	1=ON / 0=OFF
Module 3 Start	40009	9	1=START / 0=STOP
Module 3 Pump	40010	10	1=ON / 0=OFF
Module 3 Cool	40011	11	1=ON / 0=OFF
Module 1 Econ-o-Cycle	40012	12	1=ON / 0=OFF
Module 2 Econ-o-Cycle	40013	13	1=ON / 0=OFF
Module 3 Econ-o-Cycle	40014	14	1=ON / 0=OFF
Alarm Points			
Communications	40289:0	289:0	
Module 1 High Head Pressure	40289:1	289:1	
Module 2 High Head Pressure	40289:2	289:2	
Module 3 High Head Pressure	40289:3	289:3	
Module 1 No Water Flow	40289:4	289:4	
Module 2 No Water Flow	40289:5	289:5	
Module 3 No Water Flow	40289:6	289:6	
Module 1 High Water Temp.	40289:7	289:7	
Module 2 High Water Temp.	40289:8	289:8	
Module 3 High Water Temp.	40289:9	289:9	
Module 1 Low Water Temp.	40289:10	289:10	

SiteScan Availability			Notes:
Alarm Points			
Module 2 Low Water Temp.	40290:0	290:0	
Module 3 Low Water Temp.	40290:1	290:1	
Module 1 No Power	40290:2	290:2	
Module 2 No Power	40290:3	290:3	
Module 3 No Power	40290:4	290:4	
Setpoints (Set)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
None			
Reports			
Status			

Air Unit - Hiross Microface

Hardware Compatibility	
Liebert Units:	Liebert Hiross Microface
SiteScan Interface Modules:	SiteLink (All)
BMS interface Modules:	Liebert Hiross Hirolink

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Unit On Off			
Heater Working Hours			
Humidifier Working Hours			
Compressor 1 Working Hours			
Conditioner Working Hours			
Low Humidity Warning			
High Humidity Warning			
Low Temperature Warning			
High Temperature Warning			
Humidity Proportional Band			
Temperature Proportional Band			
Room Humidity Setpoint			
Room Temperature Setpoint 1			
Compressor 2 Working Hours			
Free-cooling Working Hours			
Cooling Ramp			
Status Dehumidification			
Status Electrical Heater 2			
Status Electrical Heater 1			
Status Compressor 1			
Humidifier Current			
Room Humidity			
Room Temperature			
Status Compressor 2			
Free-cooling Status			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Compressor 1 High Pressure			
Compressor 1 Low Pressure			
High Chilled Water			
Low Chilled Water Flow			
Electrical Heaters Overheated			
Fan Failure Warning			
Fan Failure Alarm			
Clogged Filters			
Water Leakage Warning			
Water Leakage Alarm			
User Input 1 Triggered Warning			
User Input 1 Triggered Alarm			
Humidifier Failure			
Humidifier High Current			
Humidifier Failure			
Humidifier Failure			
Humidifier Cylinder Worn			
High Room Temperature Warning			
Low Room Temperature Warning			
High Room Humidity Warning			
Low Room Humidity Warning			
High Room Temperature Alarm			
Low Room Temperature Alarm			
High Room Humidity Alarm			
Low Room Humidity Alarm			
Cond. Working Hrs Exceeded			
Comp 1 Working Hours Exceeded			
Humd. Working Hours Exceeded			
PTC Sensor Failure			
Room Sensor Failure Warning			
Room Sensor Failure Alarm			
EEAP Sensor Failure			
Water Presence Sensor Failure			
Network Failure			
Out Of Memory			
Unit On			
Unit Off			
Sleep Mode			
Standby Mode			
Power On Unit Login			
Power Off			
Unit 1 Disconnected			

Unit 2 Disconnected			
Unit 3 Disconnected			
Unit 4 Disconnected			
Unit 5 Disconnected			
Unit 6 Disconnected			
Unit 7 Disconnected			
Unit 8 Disconnected			
Compressor 2 High Pressure			
Compressor 2 Low Pressure			
Comp 2 Working Hours Exceeded			
Outdoor Temperature Sensor			
Glycol Temperature Sensor			
Free-cooling Stopped For 1 Hour			
On-Off By Hiromatic Not Enabled			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Smoke Alarm			
No Power (User Input)			
Power On (User Input)			
User Input 2 Triggered			
User Input 2 Triggered			
No Connection To Unit 1			
Compressor 1 Motor Protection			
Compressor 2 Motor Protection			
Fire Alarm			
Out Of Memory			
Condenser 1 Fan Failure			
Condenser 2 Fan Failure			
Network Ping			
Subgroup-Id Not Unique			
Subgroup-Unit 1 Not Connected			
Subgroup-Unit 2 Not Connected			
Share Rm. Sensor Failure Warn			
Share Rm. Sensor Failure Alarm			
Share Outdoor Temp Sensor			
Share Glycol Temp Sensor			
Unit Synch (Short Reset)			
Humidifier High Temperature			
Humidifier Overflow			
Setpoints (View)			
Room Temperature Setpoint 1			
Temperature Proportional Band			
Room Humidity Setpoint			
Humidity Proportional Band			
High Temperature Alarm Setpoint			
Low Temp Alarm Setpoint			
High Humidity Alarm Setpoint			
Low Humidity Alarm Setpoint			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Control Points (Set)			
Unit On/Off			
Humidity Proportional Band			
Temperature Proportional Band			
Room Humidity Setpoint			
Room Temperature Setpoint			
Trendable Points (Set)			
Temperature			
Humidity			
Reports			
Trend			
Status			

Liebert Power Units

Power Unit – Voltage- Current Monitoring Panel – VCM

Hardware Compatibility	
Liebert Units:	Datawave, Precision Power Center
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Voltage Out X-Y	40001	1	
Voltage Out Y-Z	40002	2	
Voltage Out Z-X	40003	3	
Voltage Out X-N	40004	4	
Voltage Out Y-N	40005	5	
Voltage Out Z-N	40006	6	
Current Out A	40007	7	
Current Out B	40008	8	
Current Out C	40009	9	
Ground Current	40010	10	
Neutral Current	40011	11	
KVA	40012	12	
Alarm Points			
Communications	40289:0	289:0	
Output Undervoltage	40289:1	289:1	
Output Overvoltage	40289:2	289:2	
Transformer Overtemperature	40289:3	289:3	
Local Alarm #1	40289:4	289:4	
Local Alarm #2	40289:5	289:5	
Setpoints (View)			
None			
Control Points (Set)			
None			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Voltage Out X-Y			
Voltage Out Y-Z			
Voltage Out Z-X			
Voltage Out X-N			
Voltage Out Y-N			
Voltage Out Z-N			
Current Out A			
Current Out B			
Current Out C			
Ground Current			
Neutral Current			
kVA			
Reports			
Trend			
Status			

Power Unit – Power Monitoring Panel – PMP

Hardware Compatibility	
Liebert Units:	Datawave, Precision Power Center
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Voltage In A-B	40001	1	
Voltage In B-C	40002	2	
Voltage In C-A	40003	3	
Voltage Out A-B	40004	4	
Voltage Out B-C	40005	5	
Voltage Out C-A	40006	6	
Voltage Out A-N	40007	7	
Voltage Out B-N	40008	8	
Voltage Out C-N	40009	9	
Current Out A	40010	10	
Current Out B	40011	11	
Current Out C	40012	12	
Ground Current	40013	13	Divide by 10 for correct value
Neutral Current	40014	14	
KVA	40015	15	
KW	40016	16	
Frequency	40017	17	Divide by 10 for correct value
% Capacity A	40018	18	
% Capacity B	40019	19	
% Capacity C	40020	20	
Alarm Points			
Communications	40289:0	289:0	
Output Undervoltage	40289:1	289:1	
Output Overvoltage	40289:2	289:2	
Output Overcurrent	40289:3	289:3	
Frequency Deviation	40289:4	289:4	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Ground Overcurrent	40289:5	289:5	
Transformer Overtemperature	40289:6	289:6	
Ground Fault	40289:7	289:7	
Ground Failure	40289:8	289:8	
Liquid Detected	40289:9	289:9	
Security Alarm	40289:10	289:10	
Phase Rotation/Loss	40290:0	290:0	
Datawave Overtemperature	40290:1	290:1	
Emergency Shutdown	40290:2	290:2	
Load On Bypass	40290:3	290:3	
Load Alarm	40290:4	290:4	
Custom Alarm #1	40290:5	290:5	
Custom Alarm #2	40290:6	290:6	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
Voltage In A-B			
Voltage In B-C			
Voltage In C-A			
Voltage Out A-B			
Voltage Out B-C			
Voltage Out C-A			
Voltage In A-N			
Voltage In B-N			
Voltage In C-N			
Current Out A			
Current Out B			
Current Out C			
% Capacity A			
% Capacity B			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
% Capacity C			
Ground Current			
Neutral Current			
KW			
KVA			
Reports			
Trend			
Status			

Power Unit – Voltage-Current-Freq. Monitor Panel – VCF

Hardware Compatibility	
Liebert Units:	MPU4000, Datawave, Precision Power Center
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Voltage Out X-Y	40001	1	
Voltage Out Y-Z	40002	2	
Voltage Out Z-X	40003	3	
Voltage Out X-N	40004	4	
Voltage Out Y-N	40005	5	
Voltage Out Z-N	40006	6	
Current Out A	40007	7	
Current Out B	40008	8	
Current Out C	40009	9	
Ground Current	40010	10	
Neutral Current	40011	11	
KVA	40012	12	
Frequency	40013	13	Divide by 10 for correct value
Alarm Points			
Communications	40289:0	289:0	
Output Undervoltage	40289:1	289:1	
Output Overvoltage	40289:2	289:2	
Transformer Overtemperature	40289:3	289:3	
Local Alarm #1	40289:4	289:4	
Local Alarm #2	40289:5	289:5	
Setpoints (View)			
None			
Control Points (Set)			
None			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Voltage Out X-Y			
Voltage Out Y-Z			
Voltage Out Z-X			
Voltage Out X-N			
Voltage Out Y-N			
Voltage Out Z-N			
Current Out A			
Current Out B			
Current Out C			
Ground Current			
Neutral Current			
kVA			
Reports			
Trend			
Status			

Power Unit – Power Monitoring Panel (Ext. Protocol) – PM2

Hardware Compatibility	
Liebert Units:	Datawave, Precision Power Center
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Voltage In X-Y	40001	1	
Voltage In Y-Z	40002	2	
Voltage In Z-X	40003	3	
Voltage Out A-B	40004	4	
Voltage Out B-C	40005	5	
Voltage Out C-A	40006	6	
Voltage Out A-N	40007	7	
Voltage Out B-N	40008	8	
Voltage Out C-N	40009	9	
Current Out A	40010	10	
Current Out B	40011	11	
Current Out C	40012	12	
Ground Current	40013	13	Divide by 10 for correct value
Neutral Current	40014	14	
KVA	40015	15	
KW	40016	16	
Frequency	40017	17	Divide by 10 for correct value
% Capacity A	40018	18	
% Capacity B	40019	19	
% Capacity C	40020	20	
Power Factor	40021	21	Divide by 100 for correct value
Kilowatt Hours			
THD Voltage X			
THD Voltage Y			
THD Voltage Z			
THD Current X			
THD Current Y			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
THD Current Z			
K Factor Current X			
K Factor Current Y			
K Factor Current Z			
CREST Factor Current X			
CREST Factor Current Y			
CREST Factor Current Z			
Alarm Points			
Communications	40289:0	289:0	
Output Undervoltage	40289:1	289:1	
Output Overvoltage	40289:2	289:2	
Output Overcurrent	40289:3	289:3	
Frequency Deviation	40289:4	289:4	
Ground Overcurrent	40289:5	289:5	
Transformer Overtemperature	40289:6	289:6	
Ground Fault	40289:7	289:7	
Ground Failure	40289:8	289:8	
Liquid Detected	40289:9	289:9	
Security Alarm	40289:10	289:10	
Phase Rotation/Loss	40290:0	290:0	
Datawave Overtemperature	40290:1	290:1	
Emergency Shutdown	40290:2	290:2	
Load On Bypass	40290:3	290:3	
Local Alarm #1	40290:4	290:4	
Local Alarm #2	40290:5	290:5	
Output Voltage THD	40290:6	290:6	
Custom Alarm #1	40290:7	290:7	
Custom Alarm #2	40290:8	290:8	
Output Voltage THD	40290:9	290:9	
Setpoints (View)			
None			
Control Points (Set)			
None			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Voltage In A-B			
Voltage In B-C			
Voltage In C-A			
Voltage Out A-B			
Voltage Out B-C			
Voltage Out C-A			
Voltage In A-N			
Voltage In B-N			
Voltage In C-N			
Current Out A			
Current Out B			
Current Out C			
% Capacity A			
% Capacity B			
% Capacity C			
Ground Current			
Neutral Current			
KW			
KVA			
Power Factor			
THD Voltage X			
THD Voltage Y			
THD Voltage Z			
THD Current X			
THD Current Y			
THD Current Z			
K Factor Current X			
K Factor Current Y			
K Factor Current Z			
CREST Factor Current X			
CREST Factor Current Y			
CREST Factor Current Z			
Reports			
Trend			
Status			

Power Unit – Static Transfer Switch PDU – EDS

Hardware Compatibility	
Liebert Units:	Static Transfer Switch
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Transfer Count	40001	1	
Preferred Source	40002	2	1=Source 1 / 0=Source 2
Load On Source 1 or Source 2	40003	3	1=Source 1 / 2=Source 2
Source 1 Voltage A-B	40004	4	
Source 1 Voltage B-C	40005	5	
Source 1 Voltage C-A	40006	6	
Source 1 Current A	40007	7	
Source 1 Current B	40008	8	
Source 1 Current C	40009	9	
Source 1 Frequency	40010	10	Divide by 10 for correct value
Source 2 Voltage A-B	40011	11	
Source 2 Voltage B-C	40012	12	
Source 2 Voltage C-A	40013	13	
Source 2 Current A	40014	14	
Source 2 Current B	40015	15	
Source 2 Current C	40016	16	
Source 2 Frequency	40017	17	Divide by 10 for correct value
KW	40018	18	
KVA	40019	19	
Auto Transfer Timer	40020	20	
Nominal Voltage Deviation	40021	21	
Phase Differential Limit	40022	22	
Frequency Deviation	40023	23	Divide by 10 for correct value
Auto Transfer Enabled	40024	24	1=Enabled / 0=Disabled

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Communications	40289:0	289:0	
Logic Failure	40289:1	289:1	
Equipment Overtemperature	40289:2	289:2	
Power Supply 1 Fault	40289:3	289:3	
Source 1 Overvoltage	40289:4	289:4	
Source 1 Undervoltage	40289:5	289:5	
Source 2 Overvoltage	40289:6	289:6	
Source 2 Undervoltage	40289:7	289:7	
Source 1 Overload	40289:8	289:8	
Shorted SCR1	40289:9	289:9	
Shorted SCR2	40289:10	289:10	
Open SCR1	40290:0	290:0	
Open SCR2	40290:1	290:1	
Fan Failure	40290:2	290:2	
Source 2 Overload	40290:3	290:3	
Power Supply 2 Fault	40290:4	290:4	
Frequency Deviation	40290:5	290:5	
Transfer Inhibit	40290:6	290:6	
Auto Retransfer Primed	40290:7	290:7	
Out of Synchronization	40290:8	290:8	
Source 1 Failure	40290:9	290:9	
Source 2 Failure	40290:10	290:10	
Auto Retransfer Failed	40291:0	291:0	
Overload	40291:1	291:1	
Control Fuse 1 Blown	40291:2	291:2	
Control Fuse 2 Blown	40291:3	291:3	
Source 1 CB1 Open	40291:4	291:4	
Source 2 CB2 Open	40291:5	291:5	
Output CB3 Open	40291:6	291:6	
Custom Alarm 1	40291:7	291:7	
Custom Alarm 2	40291:8	291:8	
Bypass CB4 Closed	40291:9	291:9	
Bypass CB5 Closed	40291:10	291:10	
Custom Alarm 3	40292:0	292:0	
Custom Alarm 4	40292:1	292:1	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Custom Alarm 5	40292:2	292:2	
Custom Alarm 6	40292:3	292:3	
Custom Alarm 7	40292:4	292:4	
Custom Alarm 8	40292:5	292:5	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
Source 1 Voltage A-B			
Source 1 Voltage B-C			
Source 1 Voltage C-A			
Source 1 Current A			
Source 1 Current B			
Source 1 Current C			
Source 2 Voltage A-B			
Source 2 Voltage B-C			
Source 2 Voltage C-A			
Source 2 Current A			
Source 2 Current B			
Source 2 Current C			
KW			
KVA			
Reports			
Trend			
Status			

Power Unit – Static Transfer Switch PDU Dual Output – STS

Hardware Compatibility	
Liebert Units:	Static Transfer Switch
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Transfer Count	40001	1	
Preferred Source	40002	2	1=Source 1 / 0=Source 2
Load On Source 1 or Source 2	40003	3	1=Source 1 / 2=Source 2
Source 1 Voltage A-B	40004	4	
Source 1 Voltage B-C	40005	5	
Source 1 Voltage C-A	40006	6	
Source 1 Current A	40007	7	
Source 1 Current B	40008	8	
Source 1 Current C	40009	9	
Source 1 Frequency	40010	10	Divide by 10 for correct value
Source 2 Voltage A-B	40011	11	
Source 2 Voltage B-C	40012	12	
Source 2 Voltage C-A	40013	13	
Source 2 Current A	40014	14	
Source 2 Current B	40015	15	
Source 2 Current C	40016	16	
Source 2 Frequency	40017	17	Divide by 10 for correct value
KW	40018	18	
KVA	40019	19	
Auto Transfer Timer	40020	20	
Nominal Voltage Deviation	40021	21	
Phase Differential Limit	40022	22	
Frequency Deviation	40023	23	Divide by 10 for correct value
Auto Transfer Enabled	40024	24	1=Enabled / 0=Disabled
Dual Output Breaker Status			1=Enabled / 0=Disabled

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Communications	40289:0	289:0	
Logic Failure	40289:1	289:1	
Equipment Overtemperature	40289:2	289:2	
Power Supply 1 Fault	40289:3	289:3	
Source 1 Overvoltage	40289:4	289:4	
Source 1 Undervoltage	40289:5	289:5	
Source 2 Overvoltage	40289:6	289:6	
Source 2 Undervoltage	40289:7	289:7	
Source 1 Overload	40289:8	289:8	
Shorted SCR1	40289:9	289:9	
Shorted SCR2	40289:10	289:10	
Open SCR1	40290:0	290:0	
Open SCR2	40290:1	290:1	
Fan Failure	40290:2	290:2	
Source 2 Overload	40290:3	290:3	
Power Supply 2 Fault	40290:4	290:4	
Frequency Deviation	40290:5	290:5	
Transfer Inhibit	40290:6	290:6	
Auto Retransfer Primed	40290:7	290:7	
Out of Synchronization	40290:8	290:8	
Source 1 Failure	40290:9	290:9	
Source 2 Failure	40290:10	290:10	
Auto Retransfer Failed	40291:0	291:0	
Overload	40291:1	291:1	
Control Fuse 1 Blown	40291:2	291:2	
Control Fuse 2 Blown	40291:3	291:3	
Source 1 CB1 Open	40291:4	291:4	
Source 2 CB2 Open	40291:5	291:5	
Output CB3 Open	40291:6	291:6	
Custom Alarm 1	40291:7	291:7	
Custom Alarm 2	40291:8	291:8	
Bypass CB4 Closed	40291:9	291:9	
Bypass CB5 Closed	40291:10	291:10	
Output CB 3B Open	40292:0	292:0	
Custom Alarm 4	40292:1	292:1	
Custom Alarm 5	40292:2	292:2	
Custom Alarm 6	40292:3	292:3	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Custom Alarm 7	40292:4	292:4	
Custom Alarm 8	40292:5	292:5	
Setpoints (View)			
Auto Transfer Timer			
Nominal Voltage Deviation			
Phase Differential Limit			
Frequency Deviation			
Auto Transfer Enabled			
Control Points (Set)			
None			
Trendable Points (Set)			
Source 1 Voltage A-B			
Source 1 Voltage B-C			
Source 1 Voltage C-A			
Source 1 Current A			
Source 1 Current B			
Source 1 Current C			
Source 2 Voltage A-B			
Source 2 Voltage B-C			
Source 2 Voltage C-A			
Source 2 Current A			
Source 2 Current B			
Source 2 Current C			
KW			
KVA			
Reports			
Trend			
Status			

Liebert UPS Units

UPS Unit – Multi Module UPS – S600 Extended Prot. – MM4

Hardware Compatibility	
Liebert Units:	Series 600MMS
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Input Voltage A-B	40001	1	
Input Voltage B-C	40002	2	
Input Voltage C-A	40003	3	
Output Voltage A-B	40004	4	
Output Voltage B-C	40005	5	
Output Voltage C-A	40006	6	
Output Voltage A-N			
Output Voltage B-N			
Output Voltage C-N			
Output Amps Phase A	40007	7	
Output Amps Phase B	40008	8	
Output Amps Phase C	40009	9	
DC Bus Voltage	40010	10	
Battery Current	40011	11	
KVA	40012	12	
KW	40013	13	Divide by 10 fro correct value
Critical Bus Frequency	40014	14	
% Capacity Phase A	40015	15	
% Capacity Phase B	40016	16	
% Capacity Phase C	40017	17	
Input Amps Phase A	40018	18	
Input Amps Phase B	40019	19	
Input Amps Phase C	40020	20	
Total Operating Hours			
Module Number			
Total # Battery Discharge			
Accumulated Battery Time			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Accumulated Battery Amp/Hr			
Accumulated Battery kw/Hr			
Battery Charge Percent			
Battery Time Remaining			
Battery Temperature			
Alarm Points			
Communications	40289:0	289:0	
Battery Discharge	40289:1	289:1	
Input Failure	40289:2	289:2	
Hardware Shutdown	40289:3	289:3	
DC Ground Fault	40289:4	289:4	
Input CB Open	40289:5	289:5	
Output CB Open	40289:6	289:6	
DC Cap Fuse Blown	40289:7	289:7	
Low Battery Reserve	40289:8	289:8	
Output Overload	40289:9	289:9	
Rectifier Fuse Blown	40289:10	289:10	
Emergency Power Off	40290:0	290:0	
Ambient Overtemperature	40290:1	290:1	
Battery Disconnected	40290:2	290:2	
Control Power Failure	40290:3	290:3	
Overload Shutdown	40290:4	290:4	
Inverter Fault	40290:5	290:5	
Input Current Unbalanced	40290:6	290:6	
Inverter Out of Sync	40290:7	290:7	
Reverse Power	40290:8	290:8	
Low Battery Shutdown	40290:9	290:9	
DC Overvoltage Shutdown	40290:10	290:10	
Battery Cycle Buffer Full	40291:0	291:0	
Equipment Overtemperature	40291:1	291:1	
Blower/Fan Failure	40291:2	291:2	
Overtemperature Shutdown	40291:3	291:3	
Battery Room Overtemp	40291:4	291:4	
Battery Test Running	40291:5	291:5	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Setpoints (View)			
Overload Alarm			
DC Overvoltage Alarm			
Battery Discharging Alarm			
Low Battery Alarm			
Battery Shutdown 1 Alarm			
Battery Shutdown 2 Alarm			
Control Points (Set)			
None			
Trendable Pionts (Set)			
Input Voltage A-B			
Input Voltage B-C			
Input Voltage C-A			
Output Voltage A-B			
Output Voltage B-C			
Output Voltage C-A			
Output Voltage A-N			
Output Voltage B-N			
Output Voltage C-N			
Output Amps Phase A			
Output Amps Phase B			
Output Amps Phase C			
DC Bus Voltage			
KVA			
KW			
% Capacity Phase A			
% Capacity Phase B			
% Capacity Phase C			
Input Amps Phase A			
Input Amps Phase B			
Input Amps Phase C			
Reports			
Trend			
Status			

UPS Unit – Multi Module Series – MMS

Hardware Compatibility	
Liebert Units:	Series 600MMS, Series 600T MS
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Voltage In A-B	40001	1	
Voltage In B-C	40002	2	
Voltage In C-A	40003	3	
Voltage Out A-B	40004	4	
Voltage Out B-C	40005	5	
Voltage Out C-A	40006	6	
Voltage Out A-N	40007	7	
Voltage Out B-N	40008	8	
Voltage Out C-N	40009	9	
Current Out A	40010	10	
Current Out B	40011	11	
Current Out C	40012	12	
DC Bus Voltage	40013	13	
Battery Current	40014	14	
KVA	40015	15	
KW	40016	16	
Frequency	40017	17	Divide by 10 for correct value
% Capacity A	40018	18	
% Capacity B	40019	19	
% Capacity C	40020	20	
Alarm Points			
Communications	40289:0	289:0	
Battery Discharge	40289:1	289:1	
Low Battery Reserve	40289:2	289:2	
Output Overload	40289:3	289:3	
Fuse Cleared	40289:4	289:4	
Ambient Overtemperature	40289:5	289:5	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Battery Grounded	40289:6	289:6	
Battery Disconnected	40289:7	289:7	
Module Cooling Failure	40289:8	289:8	
Control Power Failure	40289:9	289:9	
Overload Shutdown	40289:10	289:10	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
Voltage In A-B			
Voltage In B-C			
Voltage In C-A			
Voltage Out A-B			
Voltage Out B-C			
Voltage Out C-A			
Voltage Out A-N			
Voltage Out B-N			
Voltage Out C-N			
Current Out A			
Current Out B			
Current Out C			
% Capacity A			
% Capacity B			
% Capacity C			
DC Bus Voltage			
DC Bus Current			
kW			
kVA			
Reports			
Trend			
Status			

UPS Unit – System Control Cabinet – S600 Ext. Prot. – SC4

Hardware Compatibility	
Liebert Units:	Series 600 SCC
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Input Voltage A-B	40001	1	
Input Voltage B-C	40002	2	
Input Voltage C-A	40003	3	
Output Voltage A-B	40004	4	
Output Voltage B-C	40005	5	
Output Voltage C-A	40006	6	
Output Voltage A-N			
Output Voltage B-N			
Output Voltage C-N			
Output Amps Phase A	40007	7	
Output Amps Phase B	40008	8	
Output Amps Phase C	40009	9	
KVA	40010	10	
KW	40011	11	
Critical Bus Frequency	40012	12	Divide by 10 for correct value
% Capacity Phase A	40013	13	
% Capacity Phase B	40014	14	
% Capacity Phase C	40015	15	
Bypass Voltage A-B	40016	16	
Bypass Voltage B-C	40017	17	
Bypass Voltage C-A	40018	18	
Output Frequency	40019	19	Divide by 10 for correct value
Bypass Frequency	40020	20	Divide by 10 for correct value
Total Operating Hours			
Number of Modules in System			
System Number			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Communications	40289:0	289:0	
Output Undervoltage	40289:1	289:1	
Output Overvoltage	40289:2	289:2	
Frequency Deviation	40289:3	289:3	
Bypass CB Open	40289:4	289:4	
Output CB Open	40289:5	289:5	
Static Switch Disconnected	40289:6	289:6	
Output Overload	40289:7	289:7	
Emergency Power Off	40289:8	289:8	
Load On Bypass	40289:9	289:9	
Static Switch Disabled	40289:10	289:10	
Control Power Failure	40290:0	290:0	
Module #1 Summary Alarm	40290:1	290:1	
Module #2 Summary Alarm	40290:2	290:2	
Module #3 Summary Alarm	40290:3	290:3	
Module #4 Summary Alarm	40290:4	290:4	
Module #5 Summary Alarm	40290:5	290:5	
Module #6 Summary Alarm	40290:6	290:6	
Bypass Not Available	40290:7	290:7	
Not OK to Transfer	40290:8	290:8	
Bypass Phase Rotation Error	40290:9	290:9	
Manual Reset/Transfer	40290:10	290:10	
Auto Re-Transfer Primed	40291:0	291:0	
Overload Transfer	40291:1	291:1	
Module #1 Offline	40291:2	291:2	
Module #2 Offline	40291:3	291:3	
Module #3 Offline	40291:4	291:4	
Module #4 Offline	40291:5	291:5	
Module #5 Offline	40291:6	291:6	
Module #6 Offline	40291:7	291:7	
Custom Alarm #1	40291:8	291:8	
Custom Alarm #2	40291:9	291:9	
Custom Alarm #3	40291:10	291:10	
Custom Alarm #4	40292:0	292:0	
Custom Alarm #5	40292:1	292:1	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Custom Alarm #6	40292:2	292:2	
Custom Alarm #7	40292:3	292:3	
Custom Alarm #8	40292:4	292:4	
Setpoints (View)			
Overload Alarm			
Control Points (Set)			
None			
Trendable Points (Set)			
Input Voltage A-B			
Input Voltage B-C			
Input Voltage C-A			
Output Voltage A-B			
Output Voltage B-C			
Output Voltage C-A			
Output Voltage A-N			
Output Voltage B-N			
Output Voltage C-N			
Output Amps Phase A			
Output Amps Phase B			
Output Amps Phase C			
kVA			
kW			
% Capacity Phase A			
% Capacity Phase B			
% Capacity Phase C			
Bypass Voltage A-B			
Bypass Voltage B-C			
Bypass Voltage C-A			
Reports			
Trend			
Status			

UPS Unit – System Control Cabinet – SCC

Hardware Compatibility	
Liebert Units:	Series 600 SCC
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Voltage In A-B	40001	1	
Voltage In B-C	40002	2	
Voltage In C-A	40003	3	
Voltage Out A-B	40004	4	
Voltage Out B-C	40005	5	
Voltage Out C-A	40006	6	
Voltage In A-N	40007	7	
Voltage In B-N	40008	8	
Voltage In C-N	40009	9	
Current Out A	40010	10	
Current Out B	40011	11	
Current Out C	40012	12	
KVA	40013	13	
KW	40014	14	
Frequency	40015	15	Divide by 10 for correct value
% Capacity Phase A	40016	16	
% Capacity Phase B	40017	17	
% Capacity Phase C	40018	18	
Alarm Points			
Communications	40289:0	289:0	
Output Overload	40289:1	289:1	
Emergency Power Off	40289:2	289:2	
Load On Bypass	40289:3	289:3	
Static Switch Disabled	40289:4	289:4	
Output Out of Limits	40289:5	289:5	
Module #1 Summary	40289:6	289:6	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Module #2 Summary	40289:7	289:7	
Module #3 Summary	40289:8	289:8	
Module #4 Summary	40289:9	289:9	
Module #5 Summary	40289:10	289:10	
Module #6 Summary	40290:0	290:0	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
Voltage In A-B			
Voltage In B-C			
Voltage In C-A			
Voltage Out A-B			
Voltage Out B-C			
Voltage Out C-A			
Voltage In A-N			
Voltage In B-N			
Voltage In C-N			
Current Out A			
Current Out B			
Current Out C			
% Capacity Phase A			
% Capacity Phase B			
% Capacity Phase C			
kW			
kVA			
Reports			
Trend			
Status			

UPS Unit – Single Module Series – SMS

Hardware Compatibility	
Liebert Units:	Series 300/500/600 Single Module UPS
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Voltage In A-B	40001	1	
Voltage In B-C	40002	2	
Voltage In C-A	40003	3	
Voltage Out A-B	40004	4	
Voltage Out B-C	40005	5	
Voltage Out C-A	40006	6	
Voltage Out A-N	40007	7	
Voltage Out B-N	40008	8	
Voltage Out C-N	40009	9	
Current Out A	40010	10	
Current Out B	40011	11	
Current Out C	40012	12	
DC Bus Voltage	40013	13	
DC Bus Current	40014	14	
KVA	40015	15	
KW	40016	16	
Frequency	40017	17	Divide by 10 for correct value
% Capacity Phase A	40018	18	
% Capacity Phase B	40019	19	
% Capacity Phase C	40020	20	
Alarm Points			
Communications	40289:0	289:0	
Battery Discharge	40289:1	289:1	
Low Battery Reserve	40289:2	289:2	
Output Overload	40289:3	289:3	
Fuse Cleared	40289:4	289:4	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Emergency Power Off	40289:5	289:5	
Ambient Overtemperature	40289:6	289:6	
Load On Bypass	40289:7	289:7	
Static Switch Disabled	40289:8	289:8	
Battery Disconnected	40289:9	289:9	
Module Cooling Failure	40289:10	289:10	
Control Power Failure	40290:0	290:0	
Overload Shutdown	40290:1	290:1	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
Voltage In A-B			
Voltage In B-C			
Voltage In C-A			
Voltage Out A-B			
Voltage Out B-C			
Voltage Out C-A			
Voltage Out A-N			
Voltage Out B-N			
Voltage Out C-N			
Current Out A			
Current Out B			
Current Out C			
% Capacity Phase A			
% Capacity Phase B			
% Capacity Phase C			
DC Bus Voltage			
DC Bus Current			
KW			
KVA			
Reports			
Trend			
Status			

UPS Unit – Single Module UPS – S600 Ext. Prot. – SM4

Hardware Compatibility	
Liebert Units:	Series 600 SMS
SiteScan Interface Modules:	DC1,DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Input Voltage A-B	40001	1	
Input Voltage B-C	40002	2	
Input Voltage C-A	40003	3	
Output Voltage A-B	40004	4	
Output Voltage B-C	40005	5	
Output Voltage C-A	40006	6	
Output Voltage A-N			
Output Voltage B-N			
Output Voltage C-N			
Output Amps Phase A	40007	7	
Output Amps Phase B	40008	8	
Output Amps Phase C	40009	9	
DC Bus Voltage	40010	10	
Battery Current	40011	11	
KVA	40012	12	
KW	40013	13	
Critical Bus Frequency	40014	14	Divide by 10 for correct value
% Capacity Phase A	40015	15	
% Capacity Phase B	40016	16	
% Capacity Phase C	40017	17	
Bypass Voltage A-B	40018	18	
Bypass Voltage B-C	40019	19	
Bypass Voltage C-A	40020	20	
Input Amps Phase A	40021	21	
Input Amps Phase B	40022	22	
Input Amps Phase C	40023	23	
Bypass Frequency	40024	24	Divide by 10 for correct value

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Bypass Frequency			
Total Operating Hours			
Module Number			
Total # Battery Discharge			
Accumulated Battery Time			
Accumulated Battery Amp/Hr			
Accumulated Battery kW/Hr			
Battery Charge Percent			
Battery Time Remaining			
Battery Temperature			
Alarm Points			
Communications	40289:0	289:0	
Output Undervoltage	40289:1	289:1	
Output Overvoltage	40289:2	289:2	
Battery Discharge	40289:3	289:3	
Frequency Deviation	40289:4	289:4	
Input Failure	40289:5	289:5	
Hardware Shutdown	40289:6	289:6	
DC Ground Fault	40289:7	289:7	
Input CB Open	40289:8	289:8	
Bypass CB Open	40289:9	289:9	
Output CB Open	40289:10	289:10	
Static Switch Disconnected	40290:0	290:0	
DC Cap Fuse Blown	40290:1	290:1	
Low Battery Reserve	40290:2	290:2	
Output Overload	40290:3	290:3	
Rectifier Fuse Blown	40290:4	290:4	
Emergency Power Off	40290:5	290:5	
Ambient Overtemperature	40290:6	290:6	
Load On Bypass	40290:7	290:7	
Static Switch Disabled	40290:8	290:8	
Battery Disconnected	40290:9	290:9	
Control Power Failure	40290:10	290:10	
Inverter Fault	40291:0	291:0	
Input Current Unbalanced	40291:1	291:1	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Bypass Not Available	40291:2	291:2	
Not OK to Transfer	40291:3	291:3	
Bypass Phase Rotation Error	40291:4	291:4	
Manual Reset/Transfer	40291:5	291:5	
Auto Re-Transfer Primed	40291:6	291:6	
Overload Transfer	40291:7	291:7	
Reserve Power	40291:8	291:8	
Low Battery Shutdown	40291:9	291:9	
DC Overvoltage Shutdown	40291:10	291:10	
Battery Cycle Buffer Full	40292:0	292:0	
Equipment Overtemperature	40292:1	292:1	
Blower/Fan Failure	40292:2	292:2	
Overtemperature Shutdown	40292:3	292:3	
Custom Alarm #1	40292:4	292:4	
Custom Alarm #2	40292:5	292:5	
Custom Alarm #3	40292:6	292:6	
Custom Alarm #4	40292:7	292:7	
Custom Alarm #5	40292:8	292:8	
Custom Alarm #6	40292:9	292:9	
Custom Alarm #7	40292:10	292:10	
Custom Alarm #8	40292:0	292:0	
Battery Room Overtemp	40293:1	293:1	
Battery Test Running	40293:2	293:2	
Auto-restart Initiated	40293:3	293:3	
Auto-restart Failed	40293:4	293:4	
Setpoints (View)			
Overload Alarm			
DC Overvoltage Alarm			
Battery Discharging Alarm			
Low Battery Alarm			
Battery Shutdown 1 Alarm			
Battery Shutdown 2 Alarm			
Control Points (Set)			
None			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Input Voltage A-B			
Input Voltage B-C			
Input Voltage C-A			
Output Voltage A-B			
Output Voltage B-C			
Output Voltage C-A			
Output Voltage A-N			
Output Voltage B-N			
Output Voltage C-N			
Output Amps Phase A			
Output Amps Phase B			
Output Amps Phase C			
DC Bus Voltage			
Battery Current			
KVA			
KW			
% Capacity Phase A			
% Capacity Phase B			
% Capacity Phase C			
Bypass Voltage A-B			
Bypass Voltage B-C			
Bypass Voltage C-A			
Input Amps Phase A			
Input Amps Phase B			
Input Amps Phase C			
Reports			
Trend			
Status			

UPS Unit – Multi-Module SICE 7200 & HiPulse UPS – SMM

Hardware Compatibility	
Liebert Units:	SICE 7200
SiteScan Interface Modules:	DC1, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Output Voltage L1-L2	40001	1	
Output Voltage L2-L3	40002	2	
Output Voltage L3-L1	40003	3	
Output Voltage L1-N			
Output Voltage L2-N			
Output Voltage L3-N			
Output Amps L1	40004	4	
Output Amps L2	40005	5	
Output Amps L3	40006	6	
Output Amps Neutral			
Power L1	40007	7	
Power L2	40008	8	
Power L3	40009	9	
Bypass Frequency	40010	10	Divide by 10 for correct value
Inverter Frequency	40011	11	Divide by 10 for correct value
Input Voltage L1-L2			
Input Voltage L2-L3			
Input Voltage L3-L1			
Battery Voltage	40012	12	
Battery Amperage	40013	13	
Apparent Power L1	40014	14	
Apparent Power L2	40015	15	
Apparent Power L3	40016	16	
% Load L1	40017	17	
% Load L2	40018	18	
% Load L3	40019	19	
Module Number			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
% Battery Charge	40020	20	
Battery Temperature	40021	21	
Battery Time Remaining	40022	22	
Alarm Points			
Communications	40289:0	289:0	
Bypass Switch Open	40289:1	289:1	
Output Switch Open	40289:2	289:2	
Rectifier Switch Open	40289:3	289:3	
Battery CB Open	40289:4	289:4	
Manual Bypass Closed	40289:5	289:5	
Bypass Absent	40289:6	289:6	
Bypass Overvoltage	40289:7	289:7	
Bypass Undervoltage	40289:8	289:8	
Bypass Frequency Error	40289:9	289:9	
Bypass Phase Rotation Error	40289:10	289:10	
Bypass SCR Failure	40290:0	290:0	
Bypass Off	40290:1	290:1	
Bypass Off Via Display	40290:2	290:2	
Load On Bypass	40290:3	290:3	
Bypass Overtemperature	40290:4	290:4	
Rectifier Off	40290:5	290:5	
Rectifier Off Via Display	40290:6	290:6	
Rectifier Block	40290:7	290:7	
Rectifier Current Limit	40290:8	290:8	
Rectifier Overtemperature	40290:9	290:9	
Rectifier Fuse Failure	40290:10	290:10	
Inverter Off	40291:0	291:0	
Inverter Off Via Display	40291:1	291:1	
Inverter Block	40291:2	291:2	
Inverter Current Limit	40291:3	291:3	
Inverter Overtemperature	40291:4	291:4	
Inverter Non Sync	40291:5	291:5	
Inverter Overvoltage	40291:6	291:6	
Inverter Undervoltage	40291:7	291:7	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Inverter Fuse Failure	40291:8	291:8	
Output Overvoltage	40291:9	291:9	
Output Undervoltage	40291:10	291:10	
Output No Voltage	40292:0	292:0	
Output Waveform Error	40292:1	292:1	
Inverter Frequency Error	40292:2	292:2	
Inverter Parallel Error	40292:3	292:3	
Contactor Failure	40292:4	292:4	
Battery Test	40292:5	292:5	
Battery Test Failed	40292:6	292:6	
Battery On Load	40292:7	292:7	
Battery End of Discharge	40292:8	292:8	
Boost Time Expired	40292:9	292:9	
DC Slow Overvoltage	40292:10	292:10	
DC Undervoltage	40293:0	293:0	
Battery Fuse Failure	40293:1	293:1	
DC Fast Overvoltage	40293:2	293:2	
Transfer Count Block	40293:3	293:3	
Overload Shutdown	40293:4	293:4	
Overtemperature Shutdown	40293:5	293:5	
Emergency Stop	40293:6	293:6	
Overload Present	40293:7	293:7	
Overload Shutdown Timeout	40293:8	293:8	
Bad EEPROM	40293:9	293:9	
Error LRC Par P1	40293:10	293:10	
Error LRC Par P2			
Error LRC Par P3			
Error LRC Alarm History			
Error LRC Event History			
Internal Battery Low			
Error LRC Table			
Error LRC Panel			
Can Bus No Response			
Battery Ground Fault			
BackFeed Fault			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Synchronization Inhibited			
ECO – Mode On			
Setpoints (View)			
Power Rating			
Configuration			
Nominal Voltage			
Low Level Input Voltage			
Upper Level Input Voltage			
Low Level Output Voltage			
Upper Level Output Voltage			
Nominal Frequency			
Frequency Tolerance			
Slew Rate			
# of Battery Cells			
Rated Capacity			
Pre-End Discharge			
End of Discharge per Cell			
Maximum Voltage per Cell			
Year			
Month			
Day			
Hour			
Minute			
Second			
Control Points (Set)			
Date & Time Sync	40349	349	
Trendable Points (Set)			
Output Voltage L1-L2			
Output Voltage L2-L3			
Output voltage L3-L1			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Output Amps L1			
Output Amps L2			
Output Amps L3			

Power L1			
Power L2			
Power L3			
Battery Voltage			
Battery Amperage			
Apparent Power L1			
Apparent Power L2			
Apparent Power L3			
% Load L1			
% Load L2			
% Load L3			
Reports			
Status			
Trend			

UPS Unit – Systems Cabinet SICE 7200 UPS – SSC

Hardware Compatibility	
Liebert Units:	SICE 7200
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Output Voltage L1-L2	40001	1	
Output Voltage L2-L3	40002	2	
Output Voltage L3-L1	40003	3	
Output Voltage L1-N			
Output Voltage L2-N			
Output Voltage L3-N			
Output Amps L1	40004	4	
Output Amps L2	40005	5	
Output Amps L3	40006	6	
Output Amps Neutral			
Power L1	40007	7	
Power L2	40008	8	
Power L3	40009	9	
Bypass Frequency	40010	10	Divide by 10 for correct value
Input Voltage L1-L2			
Input Voltage L2-L3			
Input Voltage L3-L1			
Battery Voltage	40012	12	
Battery Amperage	40013	13	
Apparent Power L1	40014	14	
Apparent Power L2	40015	15	
Apparent Power L3	40016	16	
% Load L1	40017	17	
% Load L2	40018	18	
% Load L3	40019	19	
Number of Modules in System			
%Battery Charge	40020	20	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Battery Temperature	40021	21	
Battery Time Remaining	40022	22	
Alarm Points			
Communications	40289:0	289:0	
Bypass Switch Open	40289:1	289:1	
Output Switch Open	40289:2	289:2	
Battery CB Open	40289:3	289:3	
Manual Bypass Closed	40289:4	289:4	
Bypass Absent	40289:5	289:5	
Bypass Overvoltage	40289:6	289:6	
Bypass Undervoltage	40289:7	289:7	
Bypass Frequency Error	40289:8	289:8	
Bypass Phase Rotation Error	40289:9	289:9	
Bypass SCR Failure	40289:10	289:10	
Bypass Off	40290:0	290:0	
Bypass Off Via Display	40290:1	290:1	
Load On Bypass	40290:2	290:2	
Bypass Overtemperature	40290:3	290:3	
Inverter Non Sync	40290:4	290:4	
Output Overvoltage	40290:5	290:5	
Output Undervoltage	40290:6	290:6	
Output No Voltage	40290:7	290:7	
Output Waveform Error	40290:8	290:8	
Transfer Count Block	40290:9	290:9	
Overload Shutdown	40290:10	290:10	
Overtemperature Shutdown	40291:0	291:0	
Emergency Stop	40291:1	291:1	
Overload Present	40291:2	291:2	
Overload Shutdown Timeout	40291:3	291:3	
Bad EEPROM	40291:4	291:4	
Error LRC Par P1	40291:5	291:5	
Error LRC Par P2			
Error LRC Par P3			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Error LRC Alarm History			
Error LRC Event History			
Internal Battery Low			
Error LRC Table			
Error LRC Panel			
Can Bus No Response			
Setpoints (View)			
Power Rating			
Configuration			
Nominal Voltage			
Low Level Input Voltage			
Upper Level Input Voltage			
Low Level Output Voltage			
Upper Level Output Voltage			
Nominal Frequency			
Frequency Tolerance			
Year			
Month			
Day			
Hour			
Minute			
Second			
Control Points (Set)			
Date & Time Sync			
Trendable Points (Set)			
Output Voltage L1-L2			
Output Voltage L2-L3			
Output Voltage L3-L1			
Output Amps L1			
Output Amps L2			
Output Amps L3			
Power L1			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Power L2			
Power L3			
Battery Voltage			
Battery Amperage			
Apparent Power L1			
Apparent Power L2			
Apparent Power L3			
% Load L1			
% Load L2			
% Load L3			
Reports			
Status			
Trend			

UPS Unit – Single Module SICE 7200 & HiPulse UPS – SSM

Hardware Compatibility	
Liebert Units:	SICE 7200
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Output Voltage L1-L2	40001	1	
Output Voltage L2-L3	40002	2	
Output Voltage L3-L1	40003	3	
Output Voltage L1-N			
Output Voltage L2-N			
Output Voltage L3-N			
Output Amps L1	40004	4	
Output Amps L2	40005	5	
Output Amps L3	40006	6	
Output Amps Neutral			
Power L1	40007	7	
Power L2	40008	8	
Power L3	40009	9	
Bypass Frequency	40010	10	Divide by 10 for correct value
Inverter Frequency	40011	11	Divide by 10 for correct value
Input Voltage L1-L2			
Input Voltage L2-L3			
Input Voltage L3-L1			
Battery Voltage	40012	12	
Battery Amperage	40013	13	
Apparent Power L1	40014	14	
Apparent Power L2	40015	15	
Apparent Power L3	40016	16	
% Load L1	40017	17	
% Load L2	40018	18	
% Load L3	40019	19	
%Battery Charge	40020	20	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Battery Temperature	40021	21	
Battery Time Remaining	40022	22	
Alarm Points			
Communications	40289:0	289:0	
Bypass Switch Open	40289:1	289:1	
Output Switch Open	40289:2	289:2	
Rectifier Switch Open	40289:3	289:3	
Battery CB Open	40289:4	289:4	
Manual Bypass Closed	40289:5	289:5	
Bypass Absent	40289:6	289:6	
Bypass Overvoltage	40289:7	289:7	
Bypass Undervoltage	40289:8	289:8	
Bypass Frequency Error	40289:9	289:9	
Bypass Phase Rotation Error	40289:10	289:10	
Bypass SCR Failure	40291:0	291:0	
Bypass Off	40291:1	291:1	
Bypass Off Via Display	40291:2	291:2	
Load On Bypass	40291:3	291:3	
Bypass Overtemperature	40291:4	291:4	
Rectifier Off	40291:5	291:5	
Rectifier Off Via Display	40291:6	291:6	
Rectifier Block	40291:7	291:7	
Rectifier Current Limit	40291:8	291:8	
Rectifier Overtemperature	40291:9	291:9	
Rectifier Fuse Failure	40291:10	291:10	
Inverter Off	40292:0	292:0	
Inverter Off Via Display	40292:1	292:1	
Inverter Block	40292:2	292:2	
Inverter Current Limit	40292:3	292:3	
Inverter Overtemperature	40292:4	292:4	
Inverter Non Sync	40292:5	292:5	
Inverter Overvoltage	40292:6	292:6	
Inverter Undervoltage	40292:7	292:7	
Inverter Fuse Failure	40292:8	292:8	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Output Overvoltage	40292:9	292:9	
Output Undervoltage	40292:10	292:10	
Output No Voltage	40293:0	293:0	
Output Waveform Error	40293:1	293:1	
Inverter Frequency Error	40293:2	293:2	
Inverter Parallel Error	40293:3	293:3	
Contactor Failure	40293:4	293:4	
Battery Test	40293:5	293:5	
Battery Test Failed	40293:6	293:6	
Battery On Load	40293:7	293:7	
Battery End of Discharge	40293:8	293:8	
Boost Time Expired	40293:9	293:9	
DC Slow Overvoltage	40293:10	293:10	
DC Undervoltage	40294:0	294:0	
Battery Fuse Failure	40294:1	294:1	
DC Fast Overvoltage	40294:2	294:2	
Transfer Count Block	40294:3	294:3	
Overload Shutdown	40294:4	294:4	
Overtemperature Shutdown	40294:5	294:5	
Emergency Stop	40294:6	294:6	
Overload Present	40294:7	294:7	
Overload Shutdown Timeout	40294:8	294:8	
Bad EEPROM	40294:9	294:9	
Error LRC Par P1	40294:10	294:10	
Error LRC Par P2			
Error LRC Par P3			
Error LRC Alarm History			
Error LRC Event History			
Internal Battery Low			
Error LRC Table			
Error LRC Panel			
Can Bus No Response			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Setpoints (View)			
Power Rating			
Configuration			
Nominal Voltage			
Low Level Input Voltage			
Upper Level Input Voltage			
Low Level Output Voltage			
Upper Level Output Voltage			
Nominal Frequency			
Frequency Tolerance			
Slew Rate			
# of Battery Cells			
Rated Capacity			
Pre-End Discharge			
End of Discharge per Cell			
Maximum Voltage per Cell			
Year			
Month			
Day			
Hour			
Minute			
Second			
Control Points (Set)			
Date & Time Sync			
Trendable Points (Set)			
Output Voltage L1-L2			
Output Voltage L2-L3			
Output Voltage L3-L1			
Output Amps L1			
Output Amps L2			
Output Amps L3			
Power L1			
Power L2			
Power L3			
Battery Voltage			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Battery Amperage			
Apparent Power L1			
Apparent Power L2			
Apparent Power L3			
% Load L1			
% Load L2			
% Load L3			
Reports			
Status			
Trend			

UPS Unit – UPStation S – DCU

Hardware Compatibility	
Liebert Units:	UPStation S
SiteScan Interface Modules:	DCU
BMS interface Modules:	

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Battery Time Remaining			
Last Battery Test Passed			
Last Self Test Passed			
Voltage In Phase A			
Voltage In Phase B			
Voltage In Phase C			
Current In Phase A			
Current In Phase B			
Current In Phase C			
Voltage Out Phase A			
Voltage Out Phase B			
Current Out Phase A			
Current Out Phase B			
Voltage Bypass Phase A			
Voltage Bypass Phase B			
Current Bypass Phase A			
Current Bypass Phase B			
VA			
Inverter Load			
Percentage Load			
Inverter Temperature			
PFC Temperature			
Battery Temperature			
Battery Voltage			
Battery Current			
Input Frequency			
Output Frequency			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Bypass Frequency			
Alarm Points			
Communications			
Inverter			
Utility Failure			
Ambient Overtemperature			
Battery Test In Progress			
Input Overvoltage			
UPS On Bypass			
Receptacle 1 Off			
Receptacle 2 Off			
Receptacle 3 Off			
Receptacle 4 Off			
Receptacle 5 Off			
Receptacle 6 Off			
Receptacle 7 Off			
Receptacle 8 Off			
Outlet Overload			
Input Frequency			
Charger Failure			
Low Battery			
Inverter Undervoltage			
Inverter Overvoltage			
Bypass Power			
UPS Status			
Setpoints (View)			
None			
Control Points (Set)			
None			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Voltage In Phase A			
Voltage In Phase B			
Voltage In Phase C			
Current In Phase A			
Current In Phase B			
Current In Phase C			
Voltage Out Phase A			
Voltage Out Phase B			
Current Out Phase A			
Current Out Phase B			
Voltage Bypass Phase A			
Voltage Bypass Phase B			
Current Bypass Phase A			
Current Bypass Phase B			
VA			
Inverter Load			
Percentage Load			
Inverter Temperature			
PFC Temperature			
Battery Temperature			
Battery Voltage			
Battery Current			
Input Frequency			
Output Frequency			
Bypass Frequency			
Reports			
Trend			
Status			

UPS Unit – UPStation S3 – US3

Hardware Compatibility	
Liebert Units:	UPStation S3
SiteScan Interface Modules:	DC1, DC4, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Bypass Voltage A-N	40016	16	
Bypass Voltage B-N	40017	17	
Bypass Voltage C-N	40018	18	
Voltage In A-N	40001	1	
Voltage In B-N	40002	2	
Voltage In C-N	40003	3	
Voltage Out A-N	40004	4	
Voltage Out B-N	40005	5	
Voltage Out C-N	40006	6	
Current Out A	40007	7	
Current Out B	40008	8	
Current Out C	40009	9	
DC Bus Voltage	40010	10	
DC Bus Current	40011	11	
KVA	40012	12	
KW	40013	13	
Inverter Temperature	40021	21	
PFC Temperature	40022	22	
Battery Temperature	40023	23	
Battery Test Status			
Input Frequency			
Bypass Frequency	40024	24	
Output Frequency	40014	14	Divide by 10 for correct value
Current In A			
Current In B			
Current In C			
% Capacity	40015	15	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Inverter Status			
Utility Status			
Bypass Status			
Battery Test in Progress			
Battery Time Remaining	40020	20	Countdown starts at 254
KVA Size	40019	19	
Alarm Points			
Communications	40289:0	289:0	
Bypass Failure	40289:1	289:1	
Input Failure	40289:2	289:2	
Battery Discharging	40289:3	289:3	
Low Battery Reserve	40289:4	289:4	
Output Overload	40289:5	289:5	
Ambient Overtemperature	40289:6	289:6	
Output Undervoltage	40289:7	289:7	
Output Overvoltage	40289:8	289:8	
Input Overvoltage	40289:9	289:9	
Charge Failure	40289:10	289:10	
UPS Off	40290:0	290:0	
Load On Bypass	40290:1	290:1	
Utility Failed	40290:2	290:2	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
Bypass Voltage A-N			
Bypass Voltage B-N			
Bypass Voltage C-N			
Voltage In A-N			
Voltage In B-N			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Voltage In C-N			
Voltage Out A-N			
Voltage Out B-N			
Voltage Out C-N			
Current In A			
Current In B			
Current In C			
Current Out A			
Current Out B			
Current Out C			
% Capacity			
DC Bus Voltage			
DC Bus Current			
KW			
KVA			
Battery Time			
Reports			
Trend			
Status			

UPS Unit – Single Module Series AP301/302 – SM3

Hardware Compatibility	
Liebert Units:	Single Module UPS AP301/302
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Bypass Voltage A-N	40016	16	
Bypass Voltage B-N	40017	17	
Bypass Voltage C-N	40018	18	
Voltage in A-N	40001	1	
Voltage in B-N	40002	2	
Voltage in C-N	40003	3	
Voltage Out A-N	40004	4	
Voltage Out B-N	40005	5	
Voltage Out C-N	40006	6	
Current In A			
Current In B			
Current In C			
Current Out A	40007	7	
Current Out B	40008	8	
Current Out C	40009	9	
% Capacity	40015	15	
DC Bus Voltage	40010	10	
DC Bus Current	40011	11	
KW	40012	12	
KVA	40013	13	
Input Frequency			
Bypass Frequency			
Output Frequency	40014	14	Divide by 10 for correct value
Last Battery Test Status	40022	22	0=failed / 1= passed
Inverter Status	40023	23	0=off / 1=on
Model Number	40020	20	
KVA Size	40019	19	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Utility Status			
Bypass Status	40024	24	0=not present / 1=present
Battery Test In Progress			
Battery Time Remaining	40021	21	Countdown timer starts at 254
Alarm Points			
Communications	40289:0	289:0	
Bypass Failure	40289:1	289:1	
Input Failure	40289:2	289:2	
Battery Discharging	40289:3	289:3	
Low Battery Reserve	40289:4	289:4	
Output Overload	40289:5	289:5	
Ambient Overtemperature	40289:6	289:6	
Output Undervoltage	40289:7	289:7	
Output Overvoltage	40289:8	289:8	
Charger Failure	40289:9	289:9	
Load On Bypass	40289:10	289:10	
Utility Failed	40290:0	290:0	
Setpoints (View)			
None			
Control Points (Set)			
None			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Trendable Points (Set)			
Bypass Voltage A-N			
Bypass Voltage B-N			
Bypass Voltage C-N			
Voltage In A-N			
Voltage In B-N			
Voltage In C-N			
Voltage Out A-N			
Voltage Out B-N			
Voltage Out C-N			
Current In A			
Current In B			
Current In C			
Current Out A			
Current Out B			
Current Out C			
% Capacity			
DC Bus Voltage			
DC Bus Current			
KW			
KVA			
Input Frequency			
Bypass Frequency			
Output Frequency			
Battery Time			
Reports			
Trend			
Status			

UPS Unit – Single Module UPS – NPower -- IMP

Hardware Compatibility	
Liebert Units:	NPower SMS
SiteScan Interface Modules:	SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Input Voltage A-B	40001	1	
Input Voltage B-C	40002	2	
Input Voltage C-A	40003	3	
Input Frequency			
Bypass Voltage A-B	40004	4	
Bypass Voltage B-C	40005	5	
Bypass Voltage C-A	40006	6	
Bypass Frequency			
Battery Voltage	40007	7	
Battery Current	40008	8	Scale by 10
Battery Temperature	40009	9	
Battery Time Remaining			
Battery Charge Percentage			
Output Voltage A-B	40010	10	
Output Voltage B-C	40011	11	
Output Voltage C-A	40012	12	
Output Voltage A-N			
Output Voltage B-N			
Output Voltage C-N			
Output Current A	40013	13	Scale by 10
Output Current B	40014	14	Scale by 10
Output Current C	40015	15	Scale by 10
Output kVA A	40016	16	
Output kVA B	40017	17	
Output kVA C	40018	18	
Output kW A	40019	19	
Output kW B	40020	20	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Output kW C	40021	21	
Output Frequency	40022	22	Scale by 10
Rated kVA Percentage	40023	23	
Rated kW Percentage	40024	24	
SBS Line Contact On/Off			
SBS Load Contact On/Off			
Input Delta Contact On/Off			
Input Wye Contact On/Off			
Output Contact On/Off			
Battery Breaker On/Off			
Trap Filter Contact On/Off			
Int. Mbypass Sw. On/Off			
Ext. Mbypass Sw. On/Off			
Year			
Month			
Day			
Hour			
Minutes			
Seconds			
Alarms Points			
Communications	40289:00		
Battery Fuse Failure	40289:01		
Battery Low Transfer	40289:02		
DC Overvoltage Transient	40289:03		
Input Phase Rotation Err	40289:04		
Rectifier Fuse Failure	40289:05		
Bypass Frequency Error	40289:06		
Bypass Overload Shutdown	40289:07		
Bypass Phase Rotation Error	40289:08		
Inverter Overload Transfer	40289:09		
Inverter Fuse Failure	40289:10		
Output Overvolt Transfer	40289:11		
Output Undervolt Transfer	40289:12		
SBS SCR Open	40289:13		

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarms Points			
SBS SCR Shorted	40289:14		
Inverter Curr.Lim. Transfer	40289:15		
Battery Overtemp CB Trip	40290:00		
Battery Gnd Fault CB Trip	40290:01		
Bypass Power Supply Fail	40290:02		
EPO Shutdown	40290:03		
Heatsink Overtemp Limit	40290:00		
Input Power Supply Fail	40290:02		
Output Power Supply Fail	40290:02		
UPS Ambient OT Limit	40290:00		
Power Supply F1 Fail	40290:02		
Rectifier Fail	40290:04		
Inverter Fail	40290:05		
Overtemp Timeout Shtdwn	40290:00		
Hardware Shutdown	40290:06		
MM Control Power Failure	40290:02		
Option Power Supply Fail	40290:02		
Battery Discharging	40290:07		
Input Current Imbalance	40290:08		
Input Line Failure	40290:09		
Input Undervoltage	40290:10		
Input Overvoltage	40290:11		
Input Overcurrent	40290:12		
Battery CB Open	40290:13		
Bypass Sync Error	40290:14		
Byp. Volts Out of Tolerance	40290:15		
Bypass Line Failure	40291:00		
Inverter Current Limit	40291:01		
Output Over / Under Frequency	40291:02		
Inverter Overload Phase A	40291:03		Supported as “Output Overload”
Inverter Overload Phase B	40291:03		Supported as “Output Overload”
Inverter Overload Phase C	40291:03		Supported as “Output Overload”
Excessive Auto ReTransfers	40291:04		Supported as “OverTemp Warning”
Aux. Overtemp Warning	40291:05		Supported as “OverTemp Warning”
Battery Overtemp Warning	40291:05		Supported as “OverTemp Warning”

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarms Points			Supported as “OverTemp Warning”
Heatsink Overtemp Warning	40291:05		Supported as “OverTemp Warning”
Inlet Air Overtemp Warning	40291:05		Supported as “OverTemp Warning”
Outlet Air Overtemp Wrning	40291:05		Supported as “OverTemp Warning”
Powerpole Fan 1 Failure	40291:06		Supported as “Fan Failure”
Powerpole Fan 2 Failure	40291:06		Supported as “Fan Failure”
Powerpole Fan 3 Failure	40291:06		Supported as “Fan Failure”
Primary Fan 1 Failure	40291:06		Supported as “Fan Failure”
Primary Fan 2 Failure	40291:06		Supported as “Fan Failure”
Primary Fan 3 Failure	40291:06		Supported as “Fan Failure”
System Fan Failure	40291:06		Supported as “Fan Failure”
SBS Unable	40291:07		
Inverter Off by User	40291:08		
Low Battery Warning	40291:09		
Battery Test Failed	40291:10		Supported as “Customer Alarm”
User Shutdown	40291:11		Supported as “Customer Alarm”
Load on Bypass	40291:12		Supported as “Customer Alarm”
Input Contact #1	40291:13		Supported as “Customer Alarm”
Input Contact #2	40291:13		Supported as “Customer Alarm”
Input Contact #3	40291:13		Supported as “Customer Alarm”
Input Contact #4	40291:13		Supported as “Customer Alarm”
Input Contact #5	40291:13		Supported as “Customer Alarm”
Input Contact #6	40291:13		Supported as “Customer Alarm”
Input Contact #7	40291:13		Supported as “Customer Alarm”
Input Contact #8	40291:13		Supported as “Customer Alarm”
Setpoints (view)			
Module Number			
# of Modules in System			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Control Points (Set)			
Date			
Time			
Trendable Points			
Input Volts A-B			
Input Volts B-C			
Input Volts C-A			
Bypass Volts A-B			
Bypass Volts B-C			
Bypass Volts C-A			
Battery Voltage			
Battery Current			
Battery Temperature (Degree C)			
Output Volts A-B			
Output Volts B-C			
Output Volts C-A			
Output Current Phase A			
Output Current Phase B			
Output Current Phase C			
Output kVA Phase A			
Output kVA Phase B			
Output kVA Phase C			
Output kW Phase A			
Output kW Phase B			
Output kW Phase C			
Percent Rated kVA			
Percent Rated kW			
Reports			
Trend & Status			

Liebert Monitoring Modules

Contact Closure Module – CCM

Hardware Compatibility	
Liebert Units:	CCM200, RCM8, VSM100
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Contact 1			
Contact 2			
Contact 3			
Contact 4			
Contact 5			
Contact 6			
Contact 7			
Contact 8			
Contact 9			
Contact 10			
Contact 11			
Contact 12			
Contact 13			
Contact 14			
Contact 15			
Contact 16			
Contact 17			
Contact 18			
Contact 19			
Contact 20			
Contact 21			
Contact 22			
Contact 23			
Contact 24			
Contact 25			
Contact 26			
Contact 27			

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Status Points (View)			
Contact 28			
Contact 29			
Contact 30			
Contact 31			
Contact 32			
Alarm Points			
Communications	40001:0	1:0	
Contact 1	40001:1	1:1	
Contact 2	40001:2	1:2	
Contact 3	40001:3	1:3	
Contact 4	40001:4	1:4	
Contact 5	40001:5	1:5	
Contact 6	40001:6	1:6	
Contact 7	40001:7	1:7	
Contact 8	40001:8	1:8	
Contact 9	40001:9	1:9	
Contact 10	40001:10	1:10	
Contact 11	40002:0	2:0	
Contact 12	40002:1	2:1	
Contact 13	40002:2	2:2	
Contact 14	40002:3	2:3	
Contact 15	40002:4	2:4	
Contact 16	40002:5	2:5	
Contact 17	40002:6	2:6	
Contact 18	40002:7	2:7	
Contact 19	40002:8	2:8	
Contact 20	40002:9	2:9	
Contact 21	40002:10	2:10	
Contact 22	40003:0	3:0	
Contact 23	40003:1	3:1	
Contact 24	40003:2	3:2	
Contact 25	40003:3	3:3	
Contact 26	40003:4	3:4	
Contact 27	40003:5	3:5	

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
Contact 28	40003:6	3:6	
Contact 29	40003:7	3:7	
Contact 30	40003:8	3:8	
Contact 31	40003:9	3:9	
Contact 32	40003:10	3:10	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
None			
Reports			
Status			

Water/Liquid Detection Unit – WDU

Hardware Compatibility	
Liebert Units:	LDS1000, LDS750
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

Available Points			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Distance	40001	1	
Feet or Meters	40002	2	1=feet / 0=meters
Alarm Points			
Communications	40289:0	289:0	
Cable Fault	40289:1	289:1	
Liquid Detected	40289:2	289:2	
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
None			
Reports			
Status			

Remote Autochangeover – RAC

Hardware Compatibility	
Liebert Units:	RAC2-8
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Unit 1	40001	1	1=on / 0=0ff
Unit 2	40002	2	1=on / 0=0ff
Unit 3	40003	3	1=on / 0=0ff
Unit 4	40004	4	1=on / 0=0ff
Unit 5	40005	5	1=on / 0=0ff
Unit 6	40006	6	1=on / 0=0ff
Unit 7	40007	7	1=on / 0=0ff
Unit 8	40008	8	1=on / 0=0ff
Alarm Points			
Communications	40289:0	289:0	
Common Alarm 1	40289:1	289:1	
Common Alarm 2	40289:2	289:2	
Common Alarm 3	40289:3	289:3	
Common Alarm 4	40289:4	289:4	
Common Alarm 5	40289:5	289:5	
Common Alarm 6	40289:6	289:6	
Common Alarm 7	40289:7	289:7	
Common Alarm 8	40289:8	289:8	
Emergency Power Operation	40289:9	289:9	
EPO All Units	40289:10	289:10	
High Temperature	40290:0	290:0	
Low Temperature	40290:1	290:1	
High Humidity	40290:2	290:2	
Low Humidity	40290:3	290:3	
Manual Override	40290:4	290:4	

SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Setpoints (View)			
None			
Control Points (Set)			
None			
Trendable Points (Set)			
None			
Reports			
Status			

Temperature/Humidity Module – THM

Hardware Compatibility	
Liebert Units:	THM100
SiteScan Interface Modules:	DC1, DC4, DC12, SiteLink (All)
BMS interface Modules:	SiteLink (All)

	Available Points		
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Status Points (View)			
Temperature Sensor 1	40001	1	
Humidity Sensor 1	40002	2	
Temperature Sensor 2	40003	3	
Humidity Sensor 2	40004	4	
Temperature Sensor 3	40005	5	
Humidity Sensor 3	40006	6	
Temperature Sensor 4	40007	7	
Humidity Sensor 4	40008	8	
Temperature Sensor 5	40009	9	
Humidity Sensor 5	40010	10	
Temperature Sensor 6	40011	11	
Humidity Sensor 6	40012	12	
Temperature Sensor 7	40013	13	
Humidity Sensor 7	40014	14	
Temperature Sensor 8	40015	15	
Humidity Sensor 8	40016	16	
Alarm Points			
Communications	40289:0	289:0	
High/Low Temperature Sensor 1			Alarm threshold determined by others
High/Low Humidity Sensor 1			Alarm threshold determined by others
High/Low Temperature Sensor 2			Alarm threshold determined by others
High/Low Humidity Sensor 2			Alarm threshold determined by others
High/Low Temperature Sensor 3			Alarm threshold determined by others
High/Low Humidity Sensor 3			Alarm threshold determined by others
High/Low Temperature Sensor 4			Alarm threshold determined by others
High/Low Humidity Sensor 4			Alarm threshold determined by others

SiteScan Availability	Modbus Register	BACnet Instance	Notes:
Alarm Points			
High/Low Temperature Sensor 5			Alarm threshold determined by others
High/Low Humidity Sensor 5			Alarm threshold determined by others
High/Low Temperature Sensor 6			Alarm threshold determined by others
High/Low Humidity Sensor 6			Alarm threshold determined by others
High/Low Temperature Sensor 7			Alarm threshold determined by others
High/Low Humidity Sensor 7			Alarm threshold determined by others
High/Low Temperature Sensor 8			Alarm threshold determined by others
High/Low Humidity Sensor 8			Alarm threshold determined by others
Setpoints (View)			
High/Low Temperature Sensor 1			
High/Low Humidity Sensor 1			
High/Low Temperature Sensor 2			
High/Low Humidity Sensor 2			
High/Low Temperature Sensor 3			
High/Low Humidity Sensor 3			
High/Low Temperature Sensor 4			
High/Low Humidity Sensor 4			
High/Low Temperature Sensor 5			
High/Low Humidity Sensor 5			
High/Low Temperature Sensor 6			
High/Low Humidity Sensor 6			
High/Low Temperature Sensor 7			
High/Low Humidity Sensor 7			
High/Low Temperature Sensor 8			
High/Low Humidity Sensor 8			
Control Points (Set)			
High/Low Temperature Sensor 1			
High/Low Humidity Sensor 1			
High/Low Temperature Sensor 2			
High/Low Humidity Sensor 2			
High/Low Temperature Sensor 3			
High/Low Humidity Sensor 3			
High/Low Temperature Sensor 4			
High/Low Humidity Sensor 4			
High/Low Temperature Sensor 5			
SiteScan Availability	**Modbus Register**	**BACnet Instance**	**Notes:**
Control Points (Set)			
High/Low Humidity Sensor 5			
High/Low Temperature Sensor 6			
High/Low Humidity Sensor 6			
High/Low Temperature Sensor 7			

High/Low Humidity Sensor 7			
High/Low Temperature Sensor 8			
High/Low Humidity Sensor 8			
Trendable Points (Set)			
Temperature 1			
Humidity 1			
Temperature 2			
Humidity 2			
Trendable Points (Set)			
Temperature 3			
Humidity 3			
Temperature 4			
Humidity 4			
Temperature 5			
Humidity 5			
Temperature 6			
Humidity 6			
Temperature 7			
Humidity 7			
Temperature 8			
Humidity 8			
Reports			
Trend			
Status			