



RPC2™ Communications Module

Technical Bulletin
Rack PDU SNMP OIDs

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1 OVERVIEW

This document is a supplement to the RPC2™ Communications Module User Guide and is intended to assist with using Simple Network Management Protocol (SNMP), Management Information Base (MIB) and Object Identifiers (OIDs) with your RPC2™ communications module and MPH2 rack PDU. For more information on using your RPC2 communications module or MPH2 rack PDU, please refer to their respective user guides.

1.1 SNMP

An SNMP manager queries an agent using User Datagram Protocol (UDP) within an IP network for specific information, and the agent will answer the query. For example:

```
C:\>snmpget -v2c -cpublic -mALL -OenU 10.88.1.69
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.35.1.1
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.35.1.1 = STRING: MPHR3341
C:\>
```

NOTE: Not all OIDs in an MIB file will return values when queried.

The SNMP agent can also send trap or notification messages.

1.1.1 Configuration

You must define on the rack PDU the devices which have access to SNMP information. You can do this from the System tab of the RPC2™ communications module.

To configure SNMP access:

1. From the System tab of the RPC2™ module user interface (UI), click *SNMP-V1V2 Access*.
-or-
Click *SNMP-V3 Access*.
2. Set the desired configuration settings and click the green Save checkmark.

To configure SNMP traps:

1. From the System tab of the RPC2 module user interface (UI), click *SNMP-V1V2 Traps*.
-or-
Click *SNMP-V3 Traps*.
2. Set the desired configuration settings and click the green Save checkmark.

NOTE: The IP address 0.0.0.0 is used to authorize a user.

NOTE: The Community string is a passphrase which needs to be configured from the management software.

Figure 1.1 SNMP-V1V2 Access Page

Entry	Network Name	Access	Community	
1	0.0.0.0	<input type="radio"/> ReadOnly <input checked="" type="radio"/> ReadWrite	VertivRackPDU	Clear
2	0.0.0.0	<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite	VertivRackPDU_RO	Clear
3	::	<input type="radio"/> ReadOnly <input checked="" type="radio"/> ReadWrite	VertivRackPDU	Clear
4	::	<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite	VertivRackPDU_RO	Clear
5		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
6		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
7		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
8		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
9		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
10		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
11		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
12		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
13		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
14		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
15		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
16		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
17		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
18		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
19		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear
20		<input checked="" type="radio"/> ReadOnly <input type="radio"/> ReadWrite		Clear

1.2 MIB File

The Management Information Base (MIB) file is a database used to manage data points. All data points are organized in a directory tree. The MIB file organizes data points by name, but each data point name is also assigned a hierarchical number based on its location in the tree. The complete numerical path of a data point is that data point's object identifier (OID).

The following is an example of a MIB file:

```

<?xml version="1.0"?><MIBData>
<Instances>
<!-- IgpPduRbEntryId.1.1 -->
<Instance valueType="Gauge" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.5.1.1" name="IgpPduRbEntryId.1.1">
<Value>
<![CDATA[1]]>
</Value>
</Instance>
<!-- IgpPduRbEntryId.1.2 -->
<Instance valueType="Gauge" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.5.1.2" name="IgpPduRbEntryId.1.2">
<Value>
<![CDATA[2]]>
</Value>
</Instance>
<!-- IgpPduRbEntryUsrLabel.1.1 -->
<Instance valueType="OctetString" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.8.1.1" name="IgpPduRbEntryUsrLabel.1.1">
<Value>
<![CDATA[Branch A]]>
</Value>
</Instance>
<!-- IgpPduRbEntryUsrLabel.1.2 -->
<Instance valueType="OctetString" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.8.1.2" name="IgpPduRbEntryUsrLabel.1.2">
<Value>
<![CDATA[Branch B]]>
</Value>
</Instance>
<!-- IgpPduRbEntrySysAssignLabel.1.1 -->
<Instance valueType="OctetString" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.20.1.1"
name="IgpPduRbEntrySysAssignLabel.1.1">
<Value>
<![CDATA[1-A]]></Value>
</Instance>
<!-- IgpPduRbEntrySysAssignLabel.1.2 -->
<Instance valueType="OctetString" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.20.1.2"
name="IgpPduRbEntrySysAssignLabel.1.2">
<Value>
<![CDATA[1-B]]>
</Value>
</Instance>
<!-- IgpPduRbEntryPositionRelative.1.1 -->
<Instance valueType="Gauge" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.25.1.1" name="IgpPduRbEntryPositionRelative.1.1">
<Value>
<![CDATA[1]]>
</Value>
</Instance>
<!-- IgpPduRbEntryPositionRelative.1.2 -->
<Instance valueType="Gauge" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.25.1.2" name="IgpPduRbEntryPositionRelative.1.2">
<Value><![CDATA[2]]>
</Value>
</Instance><!-- IgpPduRbEntrySerialNum.1.1 -->
<Instance valueType="OctetString" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.30.1.1" name="IgpPduRbEntrySerialNum.1.1">
<Value>
<![CDATA[418321G3-A]]>
</Value>
</Instance>
<!-- IgpPduRbEntrySerialNum.1.2 -->
<Instance valueType="OctetString" oid=".1.3.6.1.4.1.476.1.42.3.8.40.20.1.30.1.2" name="IgpPduRbEntrySerialNum.1.2">
<Value>
<![CDATA[418321G3-B]]>

```

```
</Value>  
</Instance>  
</Instances>  
</MIBData>
```

Within the Vertiv™ MIB Archive you'll find the following three enterprise-specific MIB files:

- LIEBERT_GP_PDU.MIB
- LIEBERT_GP_REGISTRATION.MIB
- LIEBERT_GP_SYSTEM.MIB

These files can be downloaded from <https://www.vertivco.com/en-us/support/software-download/it-management/mph2-managed-rack-pdu-software-downloads/>.

2 RPC2 CONFIGURATION SNMP OID TABLES

The following tables display information about the OIDs of the Liebert_GP_PDU.MIB.

NOTE: The following OIDs are not completely defined in that a set of row indices need to be appended in order to index into the correct row of the table. For example, IgpPduRcpEntryUsrLabel would give an OID of .1.3.6.1.4.1.476.1.42.3.8.50.20.1.10.X.Y.Z, where X=PDU number in an array, Y=Branch number, and Z=Receptacle number. The maximum dimension and range of the row indices are model and OID specific and can be determined through MIB browser analysis.

2.1 LIEBERT GP PDU-MIB::IgpPduTable

Table 2.1 Liebert-GP-PDU-MIB::IgpPduTable

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.10.5 IgpPduGrpSysStatus.0						
Gauge32	RO	<p>Bit wise logical OR of all of the 'IgpPduEntrySysStatus' columns in the 'IgpPduTable' which represents the combined statuses of all PDUs for this agent. Note the bit position is given parenthetically next to the operational state in the description below. The bit position is big endian (least significant digit is the right-most digit). The state is present in the PDU when the bit is on (value =1). The value is a logical OR of all of the following potential states of each PDU in the cluster.</p> <p>normalOperation(1): One or more PDUs in the cluster are operating normally with no active warnings or alarms.</p> <p>startUp(2): One or more PDUs are in the startup state (initializing). Control and monitoring operations may be inhibited or unavailable while the PDU is in this state.</p> <p>unknownNoSupport(4): The state of one or more PDUs are not known at this time or there is no support for this piece of information from 1 or more PDUs in the cluster/group.</p> <p>normalWithWarning(8): One or more PDUs are operating normally with one or more active warnings. Appropriate personnel should investigate the warning(s) as soon as possible and take appropriate action.</p> <p>normalWithAlarm(16): One or more PDUs are operating normally with one or more active alarms. Appropriate personnel should investigate the alarm(s) as soon as possible and take appropriate action.</p> <p>abnormalOperation(32): One or more PDUs are operating abnormally. There is a failure within the system that is unexpected under normal operating conditions. Appropriate personnel should investigate the cause as soon as possible. The normal functioning of the system is likely inhibited</p> <p>unknownCommFailure(64): The state will clear automatically when the PDU(s) are fully initialized and ready to accept.</p>	startUp(2)			
.1.3.6.1.4.1.476.1.42.3.8.19 IgpPduTableCount.0						
Gauge32	RO	Number of PDUs being monitored by this agent. This is the number of entries in the IgpPduTable.				
.1.3.6.1.4.1.476.1.42.3.8.20.1.5 IgpPduEntryId.1						
Gauge32	RO	Internal index representing a unique identifier for each PDU represented by this agent. The value is assigned by the agent at the time of discovery.				
.1.3.6.1.4.1.476.1.42.3.8.20.1.10						

Table 2.1 Liebert-GP-PDU-MIB::IgpPduTable (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
IgpPduEntryUsrLabel.1						
String	RO	User assigned label representing the PDU.	<MPH> or <MPH2> or <MPX>		0-48 characters	Default assignment depends upon device discovered at power up. The allowed characters include alphanumeric, space, and ~!#\$%^&*()_+{} []\;:?./*'&*O@
.1.3.6.1.4.1.476.1.42.3.8.20.1.15 IgpPduEntrySysAssignLabel.1						
String	RO	System assigned identifier representing the PDU.	1			The value is independent of any user assigned label or tag.
.1.3.6.1.4.1.476.1.42.3.8.20.1.20 IgpPduEntryPositionRelative.1						
Gauge32	RO	Indicates the PDU's relative position within the array.	1		1-4	
.1.3.6.1.4.1.476.1.42.3.8.20.1.25 IgpPduEntrySysStatus.1						
Gauge32	RO	<p>Bit-field of the various operational states of the PDU. The value is a logical OR of all of the following potential states of the PDU. Note the bit position is given parenthetically next to the operational state in the description below. The bit position is assumed to be a big endian format (least significant digit is the right-most digit).</p> <p>The state is present in the PDU when the bit is on (value=1).</p> <p>normalOperation(1): The PDU is operating normally with no active warnings or alarms.</p> <p>startUp(2) - The PDU is in the startup state The state is present in the PDU when the bit is on (value=1).</p> <p>normalOperation(1): The PDU is operating normally with no active warnings or alarms.</p> <p>startUp(2) - The PDU is in the startup state (initializing). Control and monitoring operations may be inhibited or unavailable while the PDU is in this state. This state will clear automatically when the PDU(s) are fully initialized and ready to accept control and monitoring commands.</p> <p>normalWithWarning(8): The PDU is operating normally with one or more active warnings. Appropriate personnel should investigate the warning(s) as soon as possible and take appropriate action.</p> <p>normalWithAlarm(16): The PDU is operating normally with one or more active alarms. Appropriate personnel should investigate the alarm(s) as soon as possible and take appropriate action.</p>				

Table 2.1 Liebert-GP-PDU-MIB::IgpPduTable (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
		abnormalOperation(32): The PDU is operating abnormally. That is there is some failure within the system that is unexpected under normal operating conditions. Appropriate personnel should investigate the cause as soon as possible. The normal functioning of the system is likely inhibited.				
.1.3.6.1.4.1.476.1.42.3.8.20.1.35 IgpPduEntryUsrTag1.1						
String	RW	A configuration parameter to set user assigned tag for the PDU. This value may be useful for enduser grouping or asset tracking purposes. The value for this tag does not need to be unique for this unit or across other units.	<empty>		0-48 characters	The allowed characters include alphanumeric, space, and ~!#\$_%+`-=[]\;:?.\%*&'@
.1.3.6.1.4.1.476.1.42.3.8.20.1.40 IgpPduEntryUsrTag2.1						
String	RW	A configuration parameter to set user assigned tag	<empty>		0-48 characters	The allowed characters include alphanumeric, space, and ~!#\$_%+`-=[]\;:?.\%*&'@
.1.3.6.1.4.1.476.1.42.3.8.20.1.45 IgpPduEntrySerialNumber.1						
String	RO	Serial number for this RPC2 module assigned at time of manufacture and is globally unique with respect to all RPC2 modules.				The agent serial numbers for each member of the array is reported.
.1.3.6.1.4.1.476.1.42.3.8.20.1.50 IgpPduEntryRbCount.1						
Gauge32	RO	Number of receptacle branches within this PDU.			1-7	Maximum seven branches are supported.
.1.3.6.1.4.1.476.1.42.3.8.20.1.55 IgpPduEntrySWOverCurrentProtection.1						
Integer	RW	A configuration parameter to enable or disable the Software Over Current Protection (SWOCP) feature to prevent unused receptacles from turning on when the 'PDU Over Current Warning' or 'PDU Over Current Alarm' threshold is violated. Only admin users shall have the authorization to unlock such receptacles. If the feature is enabled, in case of PDU Over Current Warning or Alarm condition, the following action will be taken on the receptacles: Locked & Off: No change. Locked & On: No change. Unlocked & Off: Receptacle shall be locked. Unlocked & On: If the receptacle is drawing current, then no change. If that receptacle is not drawing current, then turn it off and lock it. No action will be taken if the feature is disabled.	disabled (0)		0-1	Only applicable to PDUs having receptacle measurement and control.

2.2 LIEBERT GP PDU-MIB::lgpPduPsTable

Table 2.2 Liebert-GP-PDU-MIB::lgpPduPs Table

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.30.19 lgpPduPsTableCount.0						
Gauge32	RO	Number of power source in the lgpPduPs Table.				
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.10 lgpPduPsEntryId.1.1						
Gauge32	RO	This is a unique entry id representing a given PDU power source for the PDU.			1-3	
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.15 lgpPduPsEntrySysAssignLabel.1.1						
String	RO	System assigned identifier for this power source. The value is independent of any user assigned label or tag. The exact format of this label is system dependent and is subject to change; therefore, it should not be referenced for programmatic use.	<x>			Format is x=PDU {1-4}
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.20 gpPduPsEntryModel.1.1						
String	RO	Model number assigned at the time of manufacture.				This string is displayed on the PDU's nameplate barcode.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.25 lgpPduPsEntryWiringType.1.1						
Integer	RW	Enumerations that describe the number of poles/phase and wires of the PDU power source. not-specified (0): The type has not been specified or configure this object to specify the physical wiring type. single-phase-3-wire-L1-N-PE (1) single-phase input with three wires (1P3W). two-phase-3-wire-L1-L2-PE (2): Two-phase input with three wires (2P3W). three-phase-4-wire-L1-L2-L3-PE (3): Three-phase input with four wires (2P4W). three-phase-5-wire-L1-L2-L3-N-PE (4): Three-phase input with five wires (3P4W). two-phase-4-wire-L1-L2-N-PE (5): Two-phase input with four wires (2P4W).	0		0-5	Some UL Listed 3P4W PDUs may be equipped with a 3P5W plug type, e.g. L21-30P, where the neutral is unused. It is not recommended this object be written.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.30 lgpPduPsEntryEplnInputRated.1.1						
Gauge32	RO	Rated phase or line voltage, either line-to-neutral or line-to-line depending upon the PDU's power source assigned at the time of manufacture.		Volts		Either the nominal or maximum value of the range is reported, whichever is greater.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.35 lgpPduPsEntryEclnInputRated.1.1						

Table 2.2 Liebert-GP-PDU-MIB::IgpPduPs Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
Gauge32	RO	Rated input line current, depending upon the PDU's power source, assigned at the time of manufacture.		0.1 RMS Amperes		For UL-listed PDUs, the value is derated to 80% of actual plug/cord rating.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.40 IgpPduPsEntryFreqRated.1.1						
Gauge32	RO	Rated line frequency for this PDU assigned at the time of manufacture.	50 or 60	Hertz (Hz)	50 or 60	Irrespective of region, all PDUs can operate at either 50Hz or 60Hz.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.50 IgpPduPsEntryEnergyAccum.1.1						
Gauge32	RW	Total accumulated energy of this PDU since the last energy reset. Writing a value of zero causes the accumulated energy to be reset. Writing a nonzero value is invalid and shall result in a write error and the total energy value remains unchanged.	0	0.1 kiloWatt-hr (kW-h)		If the energy has not been reset and has not overflowed the 32-bit value, then this is the total energy since installation. This value persists across boot and power cycle events.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.55 IgpPduPsEntrySerialNum.1.1						
String	RO	Serial number for this PDU assigned at time of manufacture and is globally unique with respect to all PDU units.				This string is displayed on the PDU's nameplate barcode.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.60 IgpPduPsEntryFirmwareVersion.1.1						
String	RO	Version of firmware installed on the device.				This firmware version is unique compared to the agent's firmware version.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.65 IgpPduPsEntryPwrTotal.1.1						
Gauge32	RO	Total input power calculated from the summation of phase currents of this PDU.		Watts		
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.70 IgpPduPsEntryEcNeutral.1.1						
Gauge32	RO	Neutral current calculated from the summation of all phases of this PDU.		0.1 RMS Amperes		Supported for three-phase PDUs only.
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.75 IgpPduPsEntryEcNeutralThrshldOvrWarn.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent warning is activated. If the measured line current is equal to or over this percentage of the full scale rated value. IgpPduPsEntryEcInputRated, an overcurrent warning is activated.	40	%	0-100	Must be less than IgpPduPsEntryEcNeauralThrshldOvrAlarm
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.80 IgpPduPsEntryEcNeutralThrshldOvrAlarm.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent alarm is activated. If the measured line current is equal to or over this percentage of the full scale rated value. IgpPduPsEntryEcInputRated, an overcurrent alarm is activated.	45	%	0-100	Must be greater than IgpPduPsEntryEcNeutralThrshldOvrWarn

Table 2.2 Liebert-GP-PDU-MIB::IgpPduPs Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.85 IgpPduPsEntryUnbalancedLoadThrsldAlarm.1.1						
Gauge32	RW	A configuration parameter to set the maximum acceptable percentage of "Unbalanced Load" between any two phases. This setting shall trigger an alarm when the % difference between any two phases is greater than this value. If this value is 0% then the alarm shall be deactivated.	0	%		
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.90 IgpPduPsEntryApTotal.1.1						
Gauge32	RO	The summation of apparent power consumed by all the phases.		RMS Volts-Amperes (VA)		
.1.3.6.1.4.1.476.1.42.3.8.30.20.1.95 IgpPduPsEntryPftTotal.1.1						
Integer	RO	Power Factor of all the phases measured as the average of the phases' ratio of real power to apparent power.	0.00		0.00-1.00	
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.10 IgpPduPsLineEntryId.1.1.1						
Gauge32	RO	Unique identifier for the PDU's power source.			1-3	
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.15 IgpPduPsLineEntryLine.1.1.1						
Integer	RO	Enumerations that describe the line/phase of the PDU's power source that the measurement represents for all measurements in a given row of the table. Note that this always matches the IgpPduPsLineEntryIndex of the same row in the table. The line/phases are as follows: phase 1(1): Line 1-N or Line 1-2. phase 2(2): Line 2-N or Line 2-3. phase 3(3): Line 3-N or Line 3-1.			1-3	
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.19 IgpPduPsLineEntryEpLN Tenths.1.1.1						
Gauge32	RO	The voltage applied to the line-to neutral phase measured in tenths of volts RMS (Root Means Squared).		0.1 RMS Volts		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.20 IgpPduPsLineEntryEpLN.1.1.1						
Gauge32	RO	The voltage applied to the line-to-neutral phase measured in volts RMS (Root Mean Squared).		RMS Volts		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.21 IgpPduPsLineEntryEc.1.1.1						
Gauge32	RO	Current drawn through the phase/line measured in tenths of Amperes RMS (Root		0.1 RMS Amperes		

Table 2.2 Liebert-GP-PDU-MIB::lgpPduPs Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
		Mean Squared).				
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.22 lgpPduPsLineEntryEcHundredths.1.1.1						
Gauge32	RO	Current drawn through the phase/line measured in hundredths of Amperes RMS (Root Mean Squared).		0.01 RMS Amperes		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.35 lgpPduPsLineEntryEcThrshldUndrAlarm.1.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an undercurrent alarm is activated. If the measured line current is equal to or below this percentage of the full scale rated value, lgpPduPsEntryEcInputRated, an undercurrent alarm is activated.		%		Must be less than lgpPduPsEntryEcThrshldOverWarn and less than lgpPduPsEntryEcThrshldOverAlarm
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.36 lgpPduPsLineEntryEcThrshldOvrWarn.1.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent warning is activated. If the measured line current is equal to or over this percentage of the full scale rated value, lgpPduPsEntryEcInputRated, an overcurrent warning is activated.		%	100	Must be greater than lgpPduPsEntryEcThrshldUnderAlarm and less than lgpPduPsEntryEcThrshldOverAlarm
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.37 lgpPduPsLineEntryEcThrshldOvrAlarm.1.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent alarm is activated. If the measured line current is equal to or over this percentage of the full scale rated value, lgpPduPsEntryEcInputRated, an overcurrent alarm is activated.		%	0-100	Must be greater than lgpPduPsEntryEcThrshldUnderAlarm and greater than lgpPduEntryEcThrshldOverWarn
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.38 lgpPduPsLineEntryEcAvailBeforeAlarm.1.1.1						
Gauge32	RO	The amount that the line current may increase from its present value before an over current alarm occurs.		0.1 RMS Amperes		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.39 lgpPduPsLineEntryEcUsedBeforeAlarm.1.1.1						
Gauge32	RO	The percent of line current utilization relative to the over current alarm threshold.		0.1%	0.0-100.0	
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.60 lgpPduPsLineEntryEpLL.1.1.1						
Gauge32	RO	The voltage applied to the line-to-line phase measured in volts RMS (Root Mean Squared).		RMS Volts		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.61 lgpPduPsLineEntryEpLLTenths.1.1.1						
Gauge32	RO	The voltage applied to the line-to-line phase		0.1 RMS		

Table 2.2 Liebert-GP-PDU-MIB::IgpPduPs Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
		measured in tenth volts RMS (Root Mean Squared).		Volts		
42.3.8.30.40.1.62 IgpPduPsLineEntryEcAvailBeforeAlarmHundredths.1.1.1						
Gauge32	RO	The amount that the line current may increase from its present value before an over current alarm occurs.		0.01 RMS Amperes		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.63 IgpPduPsLineEntryPwrLN.1.1.1						
Gauge32	RO	Real power consumed by the line-to-neutral phase.		Watts		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.64 IgpPduPsLineEntryPwrLL.1.1.1						
Gauge32	RO	Real power consumed by the line-to-line phase.		Watts		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.65 IgpPduPsLineEntryApLN.1.1.1						
Gauge32	RO	Apparent power consumed by the line-to-neutral phase.		RMS Volts- Amperes (VA)		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.66 IgpPduPsLineEntryApLL.1.1.1						
Gauge32	RO	Apparent power consumed by the line-to-line phase.		RMS Volts- Amperes (VA)		
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.67 IgpPduPsLineEntryPflN.1.1.1						
Integer	RO	Power factor of the line-to-neutral phase measured as the ratio of real power to apparent power.	0.00		0.00- 1.00	
.1.3.6.1.4.1.476.1.42.3.8.30.40.1.68 IgpPduPsLineEntryPflL.1.1.1						
Integer	RO	Power factor of the line-to-line phase measured as the ratio of real power to apparent power.	0.00		0.00- 1.00	

2.3 LIEBERT GP PDU-MIB::lgpPduRbTable

Table 2.3 Liebert GP-PDU-MIB::lgpPdRb Table

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNIT	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.40.19 lgpPduRbTableCount.0						
Gauge32	RO	Number of receptacle branches in the lgpPduRbTable.			1-7	
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.5 lgpPduRbEntryId.1.1						
Gauge32	RO	A unique id assigned at device discovery representing the receptacle branch within the collection of branches being monitored by this agent. The uniqueness of this id is within the scope of PDUs being managed by a single agent.				
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.8 lgpPduRbEntryUsrLabel.1.1						
String	RW	A configuration parameter to set user assigned label representing the receptacle branch.	<Branch x>, where x=A-G		0-48 characters	The allowed characters include alphanumeric, space, and ~!#\$_%&'()*+,-=:;?@\[\]^_`{ }~
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.20 lgpPduRbEntrySysAssignLabel.1.1						
String	RO	System assigned identifier for this receptacle branch. The value is independent of any user assigned label or tag. The exact format of this label is system dependent and is subject to change; therefore, it should not be referenced for programmatic use.	<x-y>		x=PDU {1-4}, y=Branch {AG}	For MPXBRM, the Branch alpha character maps to the numerical id as follows: {A thru G} -> {1 thru 7}
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.25 lgpPduRbEntryPositionRelative.1.1						
Gauge32	RO	Indicates the relative position of the receptacle branch within the PDU.			1-7	
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.30 lgpPduRbEntrySerialNum.1.1						
String	RO	A globally unique serial number for this receptacle branch. This number is assigned to the branch at the time of manufacture and cannot be modified.				MPXBRM are hot-swappable receptacle branches and have unique serial numbers.
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.35 lgpPduRbEntryModel.1.1						
String	RO	Model number of receptacle branch device assigned at the time of manufacture.				
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.40 lgpPduRbEntryFirmwareVersion.1.1						
String	RO	Version of firmware installed on the device's receptacle branch hardware.				
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.41 lgpPduRbEntryUsrTag.1.1.1						

Table 2.3 Liebert GP-PDU-MIB::IgpPdRb Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNIT	RANGE	COMMENT
String	RW	A configuration parameter to set user assigned tag for the receptacle branch. This value may be useful for end user grouping or asset tracking purposes. The value for this tag does not need to be unique for this unit or across other units.	<empty>		0-48 characters	The allowed characters include alphanumeric, space, and ~!#\$_%&'()*+,-:; +`-={} ~\;:?.\%^\&*O@
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.42 IgpPduRbEntryUsrTag2.1.1						
String	RW	A configuration parameter to set user assigned tag for the receptacle branch. This value may be useful for end user grouping or asset tracking purposes. The value for this tag does not need to be unique for this unit or across other units.			0-48 characters	The allowed characters include alphanumeric, space, and ~!#\$_%&'()*+,-:; +`-={} ~\;:?.\%^\&*O@
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.45 IgpPduRbEntryReceptacleType.1.1						
Integer	RO	Enumerations that describe the type of receptacles installed on this receptacle branch. not-specified(0): If this value is returned, either the receptacle type has not been specified/configured or the agent monitoring this PDU does not have a SNMP enumeration defined to the type. nema-5-20R-20-Amp(1) iec-C13 -sheet-F-10-Amp (2) iec-C19-sheet-J-16-Amp(3) iec-C13-sheet-F-10-Amp-and-iec-C19-sheet-J-16-Amp(4) nema-5-20R-20-Amp and-iec-C13 -sheet-F-10-Amp(5) nema-5-20R-20-Amp and-iec-C19 -sheet-J-16-Amp(6) cee-7-type-E-schuko(7)	0		0-7	
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.50 IgpPduRbEntryCapabilities.1.1						
Integer	RO	Enumerations that describe the supported receptacle branch performance capabilities. not-specified(0) no-optional-capabilities(1): Does not support receptacle measurement and control. measurement-only(2): Supports receptacle measurements. measurement-and-control(3): Supports receptacle measurements and receptacle control. control-only (4): Supports receptacle control.	0		0-6	All PDUs support input measurements. First generation MPH models do not support voltage and power-related measurements at the branches.

Table 2.3 Liebert GP-PDU-MIB::IgpPdRb Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNIT	RANGE	COMMENT
		current-measurement-only(5): Supports current measurements only. current measurement-and-control(6): supports current measurements.				
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.55 IgpPdRbEntryLineSource.1.1						
Integer	RO	Enumerations that describe the PDU's voltage source phasing supplying power to this receptacle branch. not-specified (0): The line source supplying power to the load for this receptacle branch has not been specified or configured. line-1-N(1): The load for this receptacle branch is supplied by a line-to-neutral configuration. line-2-N(2): The load for this receptacle branch is supplied by a line-to-neutral configuration. (line 2 to neutral). line-3-N (3): The load for this receptacle branch is supplied by a line-to-neutral configuration. line-1-line-2(4): The load for this receptacle branch is supplied by a line-to-line configuration. line-2-line-3(5): The load for this receptacle branch is supplied by a line-to-line configuration. line-3 line-1(6): The load for this receptacle branch is supplied by a line to-line configuration. line-1-line-2-and-line-1 neutral(7): The load for this mixed receptacle branch is supplied by a line-to-line and line-to-neutral configuration. line-2-line-3-and-line-2-neutral(8): The load for this mixed receptacle branch is supplied by a line-to-line and line-to-neutral configuration. line-3-line-1-and-line-3-neutral(9): The load for this mixed receptacle branch is supplied by a line-to-line and line-to-neutral configuration.				
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.60 IgpPdRbEntryRcpCount.1.1						
Gauge32	RO	The number of receptacles on this receptacle branch.				
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.70 IgpPdRbEntryEpRated.1.1						
Gauge32	RO	Rated phase or line voltage, either line-to-neutral or line-to-line, for the receptacle branch assigned at the time of		0.1 RMS Volts		Either the nominal or maximum value of the range is reported, whichever is greater.

Table 2.3 Liebert GP-PDU-MIB::lgpPdRb Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNIT	RANGE	COMMENT
		manufacture.				
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.75 lgpPduRbEntryEcRated.1.1						
Gauge32	RO	Rated input line current for the receptacle branch assigned at the time of manufacture.		0.1 RMS Volts		
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.80 lgpPduRbEntryFreqRated.1.1						
Gauge32	RO	Rated line frequency for the receptacle branch and its associated receptacles assigned at the time of manufacture.	50 or 60	60 Hertz (Hz)	50 or 60	Irrespective of region, all PDUs can operate at either 50Hz or 60Hz.
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.85 lgpPduRbEntryEnergyAccum.1.1						
Gauge32	RW	Total accumulated energy of the receptacle branch since the last energy reset. Writing a value of zero causes the accumulated energy to be reset. Writing a non-zero value is invalid and shall result in a write error and the total energy value remains unchanged.		0.1 kiloWatt-hour (kW-h)		If the energy has not been reset and has not overflowed the 32-bit value, then this is the total energy since installation. This value persists across boot and power cycle events.
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.100 lgpPduRbEntryEpLNTenths.1.1						
Gauge32	RO	The line-to-neutral voltage applied to the branch measured in tenth volts RMS (Root Mean Squared).		0.1 RMS Volts		
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.115 lgpPduRbEntryPwr.1.1						
Gauge32	RO	Real power consumed by the receptacle branch.		Watts		
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.120 lgpPduRbEntryAp.1.1						
Gauge32	RO	Apparent power consumed by the receptacle branch.		RMS Volts-Amperes (VA)		
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.125 lgpPduRbEntryPf.1.1						
Integer	RO	Power factor of the receptacle branch measured as the ratio of real power to apparent power.	0.00		0.00-1.00	
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.130 lgpPduRbEntryEcHundredths.1.1						
Gauge32	RO	Current drawn from the receptacle branch measured in hundredths Amperes RMS (Root Mean Squared).		0.01 RMS Amperes		
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.135 lgpPduRbEntryEcThrsldUndrAlm.1.1						
Gauge32	RW	A configuration parameter to set the	0	%	0-100	Must be less than lgpPduRbEntryEcThrsldOvrAlm

Table 2.3 Liebert GP-PDU-MIB::IgpPdRb Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNIT	RANGE	COMMENT
		threshold at which an undercurrent alarm is activated. If the measured receptacle branch current is equal to or below this percentage of the full scale rated value, IgpPdRbEntryEcRated, an undercurrent alarm is activated.				and less than IgpPdRbEntryEcThrshldOvrWarn
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.140 IgpPdRbEntryEcThrshldOvrWarn.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent warning is activated. If the measured receptacle branch current is equal to or over this percentage of the full scale rated value, IgpPdRbEntryEcRated, an overcurrent warning is activated.	90	%	0-100	Must be less than IgpPdRbEntryEcThrshldOvrAlm and greater than IgpPdRbEntryEcThrshldUndrAlm
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.145 IgpPdRbEntryEcThrshldOvrAlm.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent alarm is activated. If the measured receptacle branch current is equal to or over this percentage of the full scale rated value, IgpPdRbEntryEcRated, an over current alarm is activated.	95	%	0-100	Must be greater than IgpPdRbEntryEcThrshldUndrAlm and greater than IgpPdRbEntryEcThrshldOvrWarn
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.150 IgpPdRbEntryEcAvailBeforeAlarmHundredths.1.1						
Gauge32	RO	The amount that the receptacle branch current may increase from its present value before an overcurrent alarm occurs.		0.01 RMS Amperes		
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.160 IgpPdRbEntryEcUsedBeforeAlarm.1.1						
Gauge32	RO	The percent of receptacle branch current utilization relative to the overcurrent alarm threshold.		0.1%	0.0-100.0	
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.170 IgpPdRbEntryEpLLTenths.1.1						
Gauge32	RO	The receptacle branch line-to-line measurement in tenths of Volts RMS (Root Mean Squared).		0.1 RMS Volts		

Table 2.3 Liebert GP-PDU-MIB::IgpPdRb Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNIT	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.40.20.1.175 IgpPdRbEntrySwOverCurrentProtection.1.1						
Integer	RW	<p>A configuration parameter to enable or disable the Software Over Current Protection (SOCP) feature. If the feature is enable(1), in case of an overcurrent warning or alarm condition, the following action will be taken on the receptacles:</p> <p>Locked & On: No change. Locked & Off: No change.</p> <p>Unlocked & Off: Turn it off and Lock it.</p> <p>Unlocked & On: If load present, no change. If no load, turn it off and lock it.</p> <p>No action will be taken if the feature is disable(O).</p>	disable(O)		0-1	Only applicable to PDUs having receptacle measurement and control.
IgpPdRbLineTable		deprecated MIB table				

Table 2.4 LIEBERT - GP-PDU-MIB:IgpPduRcp Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
		line-1-N(1): The load for this receptacle is supplied by a line-to-neutral configuration. line-2-N(2): The load for this receptacle is supplied by a line-to-neutral configuration. line-3-N(3): The load for this receptacle is supplied by a line-to-neutral configuration. line-1-line-2(4): The load for this receptacle is supplied by a line-to-line configuration. line-2-line-3(5): The load for this receptacle is supplied by a line-to-line configuration. Line-3-line-1(6): The load for this receptacle is supplied by a line-to-line configuration.				
.136.14.1476.142385020.150 IgpPduRcpEntryCapabilities.1.1						
Integer	RO	Enumerations that describe the receptacle capabilities. not-specified(0) no-optional-capabilities(1): Does not support receptacle measurement and control. measurement-only(2): Supports receptacle measurements. measurement-and-control(3): Supports receptacle measurements and receptacle control. control-only(4): Supports receptacle control. current-measurement-only(5): Supports current measurements only. current measurement-and-control(6): Supports current measurements and receptacle control.	0		0-6	All PDUs support input measurements. MPH models do not support voltage and power-related measurements at the receptacles.
.136.14.1476.142385020.155 IgpPduRcpEntryEp.1.1						
Gauge32	RO	Voltage applied to the receptacle measured in volts RMS (Root Mean Squared).		RMS Volts		
.136.14.1476.142385020.156 IgpPduRcpEntryEpTenths.1.1						
Gauge32	RO	Voltage applied to the receptacle measured in tenth volts RMS (Root Mean Squared).		0.1 RMS Volts		
.136.14.1476.142385020.160 IgpPduRcpEntryEc.1.1						
Gauge32	RO	Current drawn from the receptacle measured in Amperes RMS (Root Mean Squared).		0.1 RMS Amperes		
.136.14.1476.142385020.161 IgpPduRcpEntryEcHundredths.1.1						
Gauge32	RO	Current drawn from the receptacle measured in hundredths Amperes RMS (Root Mean Squared).		0.01 RMS Amperes		
.1.3.6.1.4.1.476.1.42.3.8.50.20.1.65 IgpPduRcpEntryPwrOut.1.1.1						
Gauge32	RO	Real power consumed by the receptacle's load.		Watts		
.1.3.6.1.4.1.476.1.42.3.8.50.20.1.70 IgpPduRcpEntryApOut.1.1.1						
Gauge32	RO	Apparent power consumed by the receptacle's load.		RMS Volts-Amperes (VA)		
.136.14.1476.142385020.175 IgpPduRcpEntryPf.1.1						
Gauge32	RO	Power factor of receptacle's load measured as the ratio of real power to apparent power.	0.00		0.00-1.00	If no current measured, 0.00 is reported.
.136.14.1476.142385020.180						

Table 2.4 LIEBERT - GP-PDU-MIB:IgpPduRcp Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
IgpPduRcpEntryFreq.1.11						
Gauge32	RO	The measured line frequency of the receptacle's voltage source.	0.1 Hertz (Hz)		45.0-75.0	Irrespective of region, all PDUs can operate at either 50Hz or 60Hz.
.136.14.1476.142385020.185 IgpPduRcpEntryEnergyAccum.1.11						
Gauge32	RW	Total accumulated energy of receptacle since the last energy reset. Writing a value of zero causes the accumulated energy to be reset. Writing a nonzero value is invalid and shall result in a write error and the total energy value remains unchanged.		0.1 kiloWatt-hour (kW-h)		If the energy has not been reset and has not overflowed the 32-bit value, then this is the total energy since installation. This value persists across boot and power cycle events.
.136.14.1476.142385020.190 IgpPduRcpEntryPwrOnDelay.1.11						
Gauge32	RW	A configuration parameter to set the amount of time to wait before power is applied to the receptacle after the PDU is power cycled or rebooted. This can be used to stagger the power on sequence of multiple receptacles in order to mitigate in-rush current draw.	0	sec	0-2400	
.136.14.1476.142385020.195 IgpPduRcpEntryPwrState.1.11						
Integer	RO	Enumerations that describe the receptacle power states. unknown(0): The current power state is unknown. off(1): The current power state of the receptacle is off. on(2): The current power state of the receptacle is on. off-pending-on-delay(3): The current power state is off. The power will be on at the expiration of IgpPduRcpEntryPwrOnDelay of this receptacle.	0		0-3	
.136.14.1476.142385020.196 IgpPduRcpEntryPwrUpState.1.11						
Gauge32	RW	A configuration parameter to set enumerations that describe the state to which the receptacle shall return after a power cycle of the PDU. on(1): The receptacle shall be switched to the on state after the expiration of the power on delay, IgpPduRcpEntryPwrOnDelay. off(2): The receptacle shall be in the off state upon power cycle. last-state(3): The receptacle shall be switched to the previous state after expiration of the power on delay.	3		1-3	
.136.14.1476.142385020.1100 IgpPduRcpEntryControl.1.11						
Integer	RW	A configuration parameter to set enumerations that describe the current or configured power state of the receptacle. off(0): The current and configured power state of the receptacle is off. on(1): The current and configured power state of the receptacle is on. cycle-power(2): The receptacle is currently in a power-cycle state. The power to the receptacle is turned off momentarily and then back on.	1		0-2	For cycle-power(2) mode, a default eight second off duration is fixed.
.136.14.1476.142385020.1105 IgpPduRcpEntryControlLock.1.11						
Integer	RW	Enumerations that describe the locked state of the receptacle. unknown(0): The lock state of the receptacle is not known at this time. unlocked(1): If the receptacle is 'unlocked', then a user with proper permissions may change the receptacles state. locked(2): If the receptacle is 'locked' then its current or configured state cannot be changed.	1		0-2	
.136.14.1476.142385020.1150 IgpPduRcpEntryEcThreshldUnderAlarm.1.11						

Table 2.4 LIEBERT - GP-PDU-MIB:IgpPduRcp Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
Gauge32	RW	A configuration parameter to set the threshold at which an undercurrent alarm is activated. If the measured current is equal to or below this percentage of the full scale rated value, derived from IgpPduRcpEntryType, an undercurrent alarm is activated.	0	%	0-100	Must be less than IgpPduRcpEntryEcThrsldOverWarn and less than IgpPduRcpEntryEcThrsldOverAlarm
.136.14.1476.142385020.1151 IgpPduRcpEntryEcThrsldOverWarn.1.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent warning is activated. If the measured current is equal to or over this percentage of the full scale rated value, derived from IgpPduRcpEntryType, an overcurrent warning is activated.	90	%	0-100	Must be greater than IgpPduRcpEntryEcThrsldUnderAlarm and less than IgpPduRcpEntryEcThrsldOverAlarm
.136.14.1476.142385020.1152 IgpPduRcpEntryEcThrsldOverAlarm.1.1.1						
Gauge32	RW	A configuration parameter to set the threshold at which an overcurrent alarm is activated. If the measured current is equal to or over this percentage of the full scale rated value, derived from IgpPduRcpEntryType, an overcurrent alarm is activated.	95	%	0-100	Must be greater than IgpPduRcpEntryEcThrsldUnderAlarm and greater than IgpPduRcpEntryEcThrsldOveWarn
.136.14.1476.142385020.1159 IgpPduRcpEntryEcAvailBeforeAlarmHundredths.1.1.1						
Gauge32	RO	The amount that the current may increase from its present value before an overcurrent alarm occurs.		0.01 RMS Amperes		
.136.14.1476.142385020.1160 IgpPduRcpEntryEcAvailBeforeAlarm.1.1.1						
Gauge32	RO	The amount that the current may increase from its present value before an overcurrent alarm occurs.		0.1 RMS Amperes		
.136.14.1476.142385020.1161 IgpPduRcpEntryEcUsedBeforeAlarm.1.1.1						
Gauge32	RO	The percent of current utilization relative to the overcurrent alarm threshold.		0.1%	0.0-100.0	
.136.14.1476.142385020.1162 IgpPduRcpEntryEcCrestFactor.1.1.1						
Gauge32	RO	Receptacle current crest factor, which is the ratio of peak amplitude of the current waveform divided by its RMS value.	0.00		0.00-3.00	
.136.14.1476.142385020.1200 IgpPduRcpEntryBlinkLED.1.1.1						
Integer	RW	A configuration parameter to blink the receptacle LED. Writing blinkLED(2) will cause the LED to blink for a predefined amount of time. Reading this object will always return noAction(1).	noAction(1)		1-2	The blink duration is ten seconds.
.136.14.1476.142385020.1205 IgpPduRcpEntrySwOverTemperatureProtection.1.1.1						
Integer	RW	A configuration parameter to enable(1) or disable (0) the receptacle SW Over Temperature Protection (SWOTP) feature. If the feature is enabled, in case of Over Temperature Alarm condition, the following actions will be taken on receptacles: Locked & Off: No Change; Unlocked & Off: No Change; Unlocked & On: Turn it off. Locked & On: Turn it off and keep it locked. No action will be taken if the feature is disabled.	disable(0)		0-1	SWOTP requires a temperature sensor to be operable.
.136.14.1476.142385020.1210 IgpPduRcpEntryOperationCondition.1.1.1						
Integer	RO	Enumerations that describe the operating condition of the receptacle. normalOperation(1): Normal operation without any alarm or warning. normalWithWarning(2): A warning condition due to over/under current			1-4	

Table 2.4 LIEBERT - GP-PDU-MIB:IgpPduRcp Table (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
		normalWithAlarm(3): An alarm condition due to over/under current. abnormal(4): A condition in which the receptacle is in 'IgpPduRcpEntryPwrState=off(1)' but still drawing current.				
.136.14.1476.142385020.1215 IgpPduRcpEntryCriticality.1.1.1						
Integer	RW	A configuration parameter to mark a receptacle as critical(0) or notCritical(1).	notCritical(1)		0-1	
.136.14.1476.142385020.1220 IgpPduRcpEntryPostOnDelay.1.1.1						
Gauge32	RW	A configuration parameter to set the time interval to wait after a command is issued to switch on a receptacle. A value of zero implies that there is no delay, i.e. the receptacle is turned on immediately upon command issue.	0	sec	0-2400	
.136.14.1476.142385020.1225 IgpPduRcpEntryPostOffDelay.1.1.1						
Gauge32	RW	A configuration parameter to set the time interval to wait after a command is issued to switch off a receptacle. A value of zero implies that there is no delay, i.e. the receptacle is turned off immediately upon command issue.	0	sec	0-2400	
IgpPduAuxSensor Table			deprecated MIB section			

Table 2.5 LIEBERT - GP-PDU-MIB::IgpPduAuxMeasTable (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
		identifying or grouping this auxiliary sensor measurement within the end-users domain.			characters	space, and ~!#\$_%&*O@
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.35 IgpPduAuxMeasSensorSerialNum.1.1.1						
String	RO	Sensor's globally unique serial number assigned at the time of manufacture.				
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.40 IgpPduAuxMeasTempDegF.1.1.1						
Integer	RO	Temperature measured at the temperature sensor reported in degrees Fahrenheit.		0.1° F	33.8-185.0	
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.50 IgpPduAuxMeasTempThrsldUndrAlmDegF.1.1.1						
Integer	RO	Under temperature alarm threshold. An alarm is activated if the temperature is equal to or below this value.	64.4	0.1° F	33.8-185.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegF and less than IgpPduAuxMeasTempThrsldOvrWarnDegF and less than IgpPduAuxMeasTempThrsldUndrWarnDegF
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.55 IgpPduAuxMeasTempThrsldOvrAlmDegF.1.1.1						
Integer	RW	Over temperature alarm threshold. An alarm is activated if the temperature is equal to or above this value.	98.6	0.1° F	33.8-185.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegF and less than IgpPduAuxMeasTempThrsldOvrWarnDegF and less than IgpPduAuxMeasTempThrsldUndrWarnDegF
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.60 IgpPduAuxMeasTempThrsldUndrWarnDegF.1.1.1						
Integer	RW	Under temperature warning threshold. A warning is activated if the temperature is equal to or below this value.	68.0	0.1° F	33.8-185.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegF and less than IgpPduAuxMeasTempThrsldOvrWarnDegF and less than IgpPduAuxMeasTempThrsldUndrWarnDegF
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.65 IgpPduAuxMeasTempThrsldOvrWarnDegF.1.1.1						
Integer	RW	Over temperature warning threshold. A warning is activated if the temperature is equal to or above this value.	95.0	0.1° F	33.8-185.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegF and less than IgpPduAuxMeasTempThrsldOvrWarnDegF and less than IgpPduAuxMeasTempThrsldUndrWarnDegF
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.70 IgpPduAuxMeasTempDegC.1.1.1						
Integer	RO	Temperature measured at the temperature sensor reported in degrees Celsius	.20.0	0.1° C	1.0-85.0	
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.75 IgpPduAuxMeasTempThrsldUndrAlmDegC.1.1.1						

Table 2.5 LIEBERT - GP-PDU-MIB::IgpPduAuxMeasTable (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
Integer	RW	Under temperature alarm threshold. An alarm is activated if the temperature is equal to or below this value.	18.0	0.1° C	1.0-85.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegC and less than IgpPduAuxMeasTempThrsldOvrWarnDegC and less than IgpPduAuxMeasTempThrsldUndrWarnDegC
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.80 IgpPduAuxMeasTempThrsldOvrAlmDegC.1.1.1						
Integer	RW	Over temperature alarm threshold. An alarm is activated if the temperature is equal to or above this value	37.0	0.1° C	1.0-85.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegC and less than IgpPduAuxMeasTempThrsldOvrWarnDegC and less than IgpPduAuxMeasTempThrsldUndrWarnDegC
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.85 IgpPduAuxMeasTempThrsldUndrWarnDegC.1.1.1						
Integer	RW	Under temperature warning threshold. A warning is activated if the temperature is equal to or below this value.	20.0	0.1° C	1.0-85.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegC and less than IgpPduAuxMeasTempThrsldOvrWarnDegC and less than IgpPduAuxMeasTempThrsldUndrWarnDegC
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.90 IgpPduAuxMeasTempThrsldOvrWarnDegC.1.1.1						
Integer	RW	Over temperature warning threshold. A warning is activated if the temperature is equal to or above this value.	35.0	0.1° C	1.0-85.0	Must be less than IgpPduAuxMeasTempThrsldOvrAlmDegC and less than IgpPduAuxMeasTempThrsldOvrWarnDegC and less than IgpPduAuxMeasTempThrsldUndrWarnDegC
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.95 IgpPduAuxMeasHum.1.1.1						
Gauge32	RO	Relative humidity measured at the humidity sensor.		0.1% RH	0.0-100.0%	
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.100 IgpPduAuxMeasHumThrsldUndrAlm.1.1.1						
Gauge32	RW	Under relative humidity alarm threshold. An alarm is activated if the relative humidity is equal to or below this value.	30.0	0.1% RH	0.0-100.0%	Must be less than IgpPduAuxMeasHumThrsldOvrAlm and less than IgpPduAuxMeasHumThrsldOvrWarn and less than IgpPduAuxMeasHumThrsldUndrWarn
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.105 IgpPduAuxMeasHumThrsldOvrAlm.1.1.1						
Gauge32	RW	Over relative humidity alarm threshold. An alarm is activated if the relative humidity is equal to or above this value.	60.0	0.1% RH	0.0-100.0%	Must be less than IgpPduAuxMeasHumThrsldOvrAlm and less than IgpPduAuxMeasHumThrsldOvrWarn and less than IgpPduAuxMeasHumThrsldUndrWarn
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.110 IgpPduAuxMeasHumThrsldUndrWarn.1.1.1						
Gauge32	RW	Under relative humidity warning threshold. A warning is activated if the relative humidity is equal to or below this value.	34.0	0.1% RH	0.0-100.0%	Must be less than IgpPduAuxMeasHumThrsldOvrAlm and less than IgpPduAuxMeasHumThrsldOvrWarn and less than IgpPduAuxMeasHumThrsldUndrWarn

Table 2.5 LIEBERT - GP-PDU-MIB::IgpPduAuxMeasTable (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.115 IgpPduAuxMeasHumThrshldOvrWarn.1.1.1						
Gauge32	RW	Over relative humidity warning threshold. A warning is activated if the relative humidity is equal to or above this value.	56.0	0.1% RH	0.0-100.0%	Must be less than IgpPduAuxMeasHumThrshldOvrAlm and greater than IgpPduAuxMeasHumThrshldUndrWarn and greater than IgpPduAuxMeasHumThrshldUndrAlm
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.120 IgpPduAuxMeasDrClosureState.2.1.1						
Integer	RO	Enumerations that describe the state of the door sensor measurement. not-specified(0): The door state is unknown. open(1): The door is in the open state. closed(2): The door is in the closed state.		0-2		
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.125 IgpPduAuxMeasDrClosureConfig.2.1.1						
Integer	RW	A configuration parameter for the door state alarms. This object provides the ability to select when a door closure measurement should cause an alarm. disabled(0): The door state will never result in alarm. alarm-when-open (1): Activate an alarm when the door state becomes open.			0-1	
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.130 IgpPduAuxMeasCntctClosureState.2.2.1						
Integer	RO	The state of a contact closure sensor measurement. not-specified(0): The contact closure state is unknown. open(1): The contact closure is in the open state. closed(2): The contact closure is in the closed state.	not-specified (0)		0-2	
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.135 IgpPduAuxMeasCntctClosureConfig.2.2.1						
Integer	RW	Configure contact closure state alarms. This object provides the ability to select when a contact closure measurement should activate an alarm disabled(0): The contact closure state will never result in alarm. alarm-when-open(1): Activate an alarm when the contact closure state becomes open.	disabled(0)		0-2	

Table 2.5 LIEBERT - GP-PDU-MIB::IgpPduAuxMeasTable (continued)

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.145 IgpPduAuxMeasDiffPressure.2.3.1						
Integer32	RO	alarm-when-closed(2): Activate an alarm when the contact closure state becomes closed.		pA	-125.0 to +125.0	
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.150 IgpPduAuxMeasDiffPressureThrhldUndrAlm.2.3.1						
Integer32	RW	Under differential pressure alarm threshold. An alarm is activated if the differential pressure is equal to or below this value.	-100.0	pA	-125.0 to +125.0	Must be less than IgpPduAuxMeasDiffPressureThrhOvrAlm and less than IgpPduAuxMeasDiffPressureThrhOvrWarn and less than IgpPduAuxMeasDiffPressureThrhUndrWarn
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.155 IgpPduAuxMeasDiffPressureThrhldOvrAlm.2.3.1						
Integer32	RW	Over differential pressure alarm threshold. An alarm is activated if the differential pressure is equal to or above this value.	+100.0	pA	-125.0 to +125.0	Must be less than IgpPduAuxMeasDiffPressureThrhOvrAlm and less than IgpPduAuxMeasDiffPressureThrhOvrWarn and less than IgpPduAuxMeasDiffPressureThrhUndrWarn
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.110 IgpPduAuxMeasDiffPressureThrhldUndrWarn.2.3.1						
Integer32	RW	Under differential pressure warning threshold. A warning is activated if the differential pressure is equal to or below this value.	-50.0	pA	-125.0 to +125.0	Must be less than IgpPduAuxMeasDiffPressureThrhOvrAlm and less than IgpPduAuxMeasDiffPressureThrhOvrWarn and less than IgpPduAuxMeasDiffPressureThrhUndrWarn
.1.3.6.1.4.1.476.1.42.3.8.60.15.1.115 IgpPduAuxMeasDiffPressureThrhldOvrWarn.2.3.1						
Integer32	RW	Over differential pressure warning threshold. A warning is activated if the differential pressure is equal to or above this value.	+50.0	pA	-125.0 to +125.0	Must be less than IgpPduAuxMeasDiffPressureThrhOvrAlm and greater than IgpPduAuxMeasDiffPressureThrhUndrWarn and greater than IgpPduAuxMeasDiffPressureThrhUndrAlm

2.6 LIEBERT GP PDU-MIB::IgpPduAuxMeasOrderTable

OID / NAME						
SYNTAX	ACCESS	DESCRIPTION	DEFAULT	UNITS	RANGE	COMMENT
.1.3.6.1.4.1.476.1.42.3.8.60.20.1.15 IgpPduAuxMeasOrderSensorSerialNum.1.1						
String	RW	The sensor's globally unique serial number is assigned at the time of manufacture and is stored in IgpPduAuxMeasOrderSensorSerialNum. The sensor represented by this serial number will be, if discovered by the agent placed in the IgpPduAuxMeasTable at the location specified by the index entries herein. An empty string in this object indicates an open display position that can be occupied by any sensor not given a specific display position in this table				

2.7 SNMP Notification Traps

Table 2.6 Liebert SNMP NotificationTraps Table

MIB / OID / NAME					
LIEBERT-GP-SYSTEM-MIB .1.2.6.1.4.1.476.1.42.3.7.8 IGPSYSEVENTNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPSYSEVENTDESCRIPTION (EXAMPLES)
47	Notification	System	Generic Test	1=Active	[OctetString] Active:Message:Generic Test Event[SNMP Test]
100	Notification	System	Reboot	1=Active	[OctetString] Active:Message:PDU Restart Event [ID] System
101	Notification	System	Firmware Update Start	1=Active	[OctetString] Active:Message: FW Update Start [ID] System
					[OctetString] Cleared:Message: FW Update Start [ID] System
105	Notification	System	PDU Array Change	1=Active	OctetString] Active:Alarm:Module Removed [Type] RPC2 [Serial Num] 551831G106C2017JUL300137
					[OctetString] Cleared:Undefined:Module Added [Type] RPC2 [Serial Num]551831G106C2017JUL300137
109	Notification	System	Absent BRM	1=Active	[OctetString] Active:Alarm:Module Removed [Type]Branch Receptacle Module [SerialNum]418321G101D2014MAR040362-A
110	Notification	System	New BRM	1=Active	[OctetString] Active:Alarm:Module Added [Type]Auxiliary Sensor [SerialNum]6B00000D5124026
112	Notification	System	Absent Sensor	1=Active	[OctetString] Active:Alarm:Module Removed [Type]Auxiliary Sensor [SerialNum]20000001E1CDCC26
113	Notification	System	New Sensor	1=Active	[OctetString] Active:Undefined:Module Added [Type]Auxiliary Sensor

Table 2.6 Liebert SNMP NotificationTraps Table (continued)

MIB / OID / NAME					
LIEBERT-GP-SYSTEM-MIB 1.2.6.1.4.1.476.1.42.3.7.8 IGPSYSEVENTNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPSYSEVENTDESCRIPTION (EXAMPLES)
					[SerialNum]20000001E1CDCC26
114	Alarm	System	Too Many Sensors	1=Active	[OctetString] Active:Alarm:Too Many Sensors
				2=Cleared	[OctetString] Cleared:Alarm:Too Many Sensors
201	Alarm	PDU	Over Current	1=Active	[OctetString] Active:Alarm:PDU Over Current L1 [Label]MPH2 [V14C2600009] [Pole]L1 [Value]8.31A [Threshold]2%
				2=Cleared	[OctetString] Cleared:Alarm:PDU Over Current L3 [Label]MPH2 [V14C2600009]
202	Warning	PDU	Over Current	1=Active	[OctetString] Active:Warning:PDU Over Current L1 [Label]MPH2 [V14C2600009] [Pole]L1 [Value]0.40A [Threshold]1%
			Clear Over Current	2=Cleared	[OctetString] Cleared:Warning:PDU Over Current L1 [Label]MPH2 [V14C2600009]
203	Alarm	PDU	Low Current	1=Active	[OctetString] Active:Alarm:PDU Low Current L1 [Label]MPH2 [V14C2600009] [Pole]L1 [Value]0.00A [Threshold]1%
				2=Cleared	[OctetString]Cleared:Alarm:PDU Low Current L3 [Label]MPH2 [V14C2600009]
204	Alarm	PDU	Unbalanced Load	1=Active	[OctetString] Active:Alarm:Unbalanced Load Condition [Label]MPH2 [V14C2600009] [Threshold]1%
				2=Cleared	[OctetString] Cleared:Alarm:Unbalanced Load Condition [Label]MPH2 [V14C2600009]
205	Alarm	PDU	Over Current - Neutral	1=Active	[OctetString]Active:Alarm:PDU Neutral Over Current [Label]MPH2 [V14C2600009] [Value]8.05A [Threshold]2%
				2=Cleared	[OctetString]Cleared:Alarm:PDU Neutral Over Current [Label]MPH2 [V14C2600009]
206	Warning	PDU	Over Current - Neutral	1=Active	[OctetString]Active:Warning:PDU Over Current L1

Table 2.6 Liebert SNMP NotificationTraps Table (continued)

MIB / OID / NAME					
LIEBERT-GP-SYSTEM-MIB 1.2.6.1.4.1.476.1.42.3.7.8 IGPSYSEVENTNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPSYSEVENTDESCRIPTION (EXAMPLES)
					[Label]MPH2 [V14C2600009] [Pole]L1 [Value]0.40A [Threshold]1%
				2=Cleared	[OctetString] Cleared:Warning:PDU Neutral Over Current [Label]MPH2 [V14C2600009]
207	Alarm	PDU	Under Voltage	1=Active	[OctetString] Active:Alarm:PDU Low Voltage L3-L1 [Label]MPH2 [V14D2600032] [Phase]L1N [Value]0.1V
				2=Cleared	[OctetString] Cleared:Alarm:PDU Low Voltage (LN) [Label] MPH2 [V14C2600009]
208	Alarm	PDU	Neutral Voltage Fault	1=Active	[OctetString] Active:Alarm:Neutral Voltage Fault [Label] MPH2 [V14C2600009]
				2=Cleared	[OctetString] Cleared:Message:Neutral Voltage Fault [Label] MPH2 [V14C2600009]
300	Alarm	Branch	Open Circuit Breaker	1=Active	[OctetString] Active:Alarm:Branch Breaker Open [Label]BR F [V14C2600009]
			CB closed	2=Cleared	[OctetString] Cleared:Alarm:Branch Breaker Open [Label]BR F [V14C2600009]
302	Alarm	Branch	Over Current	1=Active	[OctetString] Active:Alarm:Branch Over Current [Label]BR A [V14C2600009] [Value]0.95A [Threshold]4%
				2=Cleared	[OctetString] Cleared:Alarm:Branch Over Current [Label]BR A [V14C2600009]
303	Warning	Branch	Over Current	1=Active	[OctetString] Active:Warning:Branch Over Current [Label]BR A [V14C2600009] [Value]0.39A [Threshold]2%
				2=Cleared	[OctetString] Cleared:Warning:Branch Over Current [Label]BR A [V14C2600009]
304	Alarm	Branch	Low Current	1=Active	[OctetString] Active:Alarm:Branch Low Current [Label]BR A [V14C2600009] [Value]0.00A [Threshold]20%
				2=Cleared	[OctetString] Cleared:Alarm:Branch Low Current [Label]BR A [V14C2600009]

Table 2.6 Liebert SNMP NotificationTraps Table (continued)

MIB / OID / NAME					
LIEBERT-GP-SYSTEM-MIB 1.2.6.1.4.1.476.1.42.3.7.8 IGPSYSEVENTNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPSYSEVENTDESCRIPTION (EXAMPLES)
305	Alarm	Branch	Under Voltage	1=Active	[OctetString] Active:Alarm:Branch Low Voltage (LN) [Label]Branch A [Value]0.9V
				2=Cleared	[OctetString] Cleared:Alarm:Branch Low Voltage (LN) [Label]Branch A
306	Alarm	Branch	Loss of Load	1=Active	[OctetString]Active:Alarm:Branch Load Loss [Label]BR A [V15K2600562]
				2=Cleared	[OctetString]Cleared:Alarm:Branch Load Loss [Label]BR A [V15K2600562]
400	Notification	Receptacle	Absent Load	1=Active	[OctetString]Active:Message:Receptacle Load Removed [Label]RCP A-1 [V16L2600645]
401	Notification	Receptacle	New Load	1=Active	[OctetString]Active:Message:Receptacle Load Added [Label]RCP A-1 [V16L2600645]
403	Alarm	Receptacle	Over Current	1=Active	[OctetString]Active:Alarm:Receptacle Over Current [Label]RCP A-1 [V16L2600645] [Value]0.41A [Threshold]2%
				2=Cleared	[OctetString]Cleared:Alarm:Receptacle Over Current [Label]RCP A-1 [V16L2600645]
404	Warning	Receptacle	Over Current	1=Active	[OctetString]Active:Warning:Receptacle Over Current [Label]RCP A-1 [V16L2600645] [Value]0.40A [Threshold]2%
				2=Cleared	[OctetString]Cleared:Warning:Receptacle Over Current [Label]RCP A-1 [V16L2600645]
405	Alarm	Receptacle	Low Current	1=Active	[OctetString] Active:Alarm:Receptacle Low Current [Label]RCP A-1 [V16L2600645] [Value]0.00A [Threshold]20%
				2=Cleared	[OctetString] Cleared:Alarm:Receptacle Low Current [Label]RCP A-1 [V16L2600645]
406	Notification	Receptacle	Power ON	1=Active	[OctetString] Active:Message:Receptacle Power State - On [Label]RCP E-1 [V14C2600009]
407	Notification	Receptacle	Power OFF	1=Active	[OctetString] Active:Message:Receptacle Power State - Off [Label]RCP E-1 [V14C2600009]
500	Alarm	Sensor	High Humidity	1=Active	[OctetString] Active:Alarm:Over Relative Humidity [Label]20000001E1CDDC26

Table 2.6 Liebert SNMP NotificationTraps Table (continued)

MIB / OID / NAME					
LIEBERT-GP-SYSTEM-MIB .1.2.6.1.4.1.476.1.42.3.7.8 IGPSYSEVENTNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPSYSEVENTDESCRIPTION (EXAMPLES)
					[Value]26.5%RH [Threshold]26.0%RH
				2=Cleared	[OctetString] Cleared:Alarm:Over Relative Humidity[Label]20000001E1CDCC26
501	Warning	Sensor	High Humidity	1=Active	[OctetString] Active:Warning:Over Relative Humidity [Label]20000001E1CDCC26 [Value]26.5%RH [Threshold]26.0%RH
				2=Cleared	[OctetString] Cleared:Warning:Over Relative Humidity [Label]20000001E1CDCC26
502	Alarm	Sensor	Low Humidity	1=Active	[OctetString] Active:Alarm:Under Relative Humidity[Label]20000001E1CDCC26 [Value]27.1%RH [Threshold]28.0%RH
				2=Cleared	[OctetString] Cleared:Alarm:Under Relative Humidity [Label]20000001E1CDCC26
503	Warning	Sensor	Low Humidity	1=Active	[OctetString] Active:Warning:Under Relative Humidity [Label]20000001E1CDCC26 [Value]33.8%RH [Threshold]34.0%RH
				2=Cleared	[OctetString] Cleared:Warning:Under Relative Humidity [Label]20000001E1CDCC26
504	Alarm	Sensor	Over Temperature	1=Active	[OctetString] Active:Alarm:Over Temperature[Label]A80000005803C042 [Value]24.0 C [Threshold]23.0 C
				2=Cleared	[OctetString] Cleared:Alarm:Over Temperature[Label]A80000005803C042
505	Warning	Sensor	Over Temperature	1=Active	[OctetString] Active:Warning:Over Temperature [Label]A80000005803C042 [Value]24.0 C [Threshold]22.0 C
				2=Cleared	[OctetString] Active:Warning:Over Temperature [Label]A80000005803C042 [Value]24.0 C [Threshold]22.0 C
506	Alarm	Sensor	Under Temperature	1=Active	[OctetString] Active:Alarm:Under Temperature[Label]A80000005803C042 [Value]24.1 C [Threshold]25.0 C
				2=Cleared	[OctetString] Cleared:Alarm:Under Temperature [Label]A80000005803C042

Table 2.6 Liebert SNMP NotificationTraps Table (continued)

MIB / OID / NAME					
LIEBERT-GP-SYSTEM-MIB 1.2.6.1.4.1.476.1.42.3.7.8 IGPSYSEVENTNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPSYSEVENTDESCRIPTION (EXAMPLES)
507	Warning	Sensor	Under Temperature	1=Active	[OctetString] Active:Warning:Under Temperature [Label]A80000005803C042 [Value]24.1 C [Threshold]26.0 C
				2=Cleared	[OctetString] Cleared:Warning:Under Temperature [Label]A80000005803C042
508	Alarm	Sensor	Open Door	1=Active	[OctetString] Active:Alarm:Door Open [Label]41000000C3F7A20-1
				2=Cleared	[OctetString] Cleared:Alarm:Door Open [Label]41000000C3F7A20-1
509	Alarm	Sensor	Open Contract	1=Active	[OctetString] Active:Alarm:Contact Closure Open [Label]2800000013F0EB20-1
					[OctetString] Cleared:Alarm:Contact Closure Open [Label]2800000013F0EB20-1
510	Alarm	Sensor	Close Contract	1=Active	[OctetString] Active:Alarm:Contact Closure Closed [Label]2800000013F0EB20-2
				2=Cleared	[OctetString] Cleared:Alarm:Contact Closure Closed [Label]2800000013F0EB20-2
513	Alarm	Sensor	Over Differential Pressure	1=Active	[OctetString] Active:Alarm: Over Differential Pressure [Label]650050000004087E [Value]9.0Pa [Threshold]5.0Pa
				2=Cleared	[OctetString] Cleared:Alarm:Over Differential Pressure [Label] 650050000004087E
514	Warning	Sensor	Over Differential Pressure	1=Active	[OctetString] Active:Alarm: Over Differential Pressure [Label]650050000004087E [Value]7.0Pa [Threshold]5.0Pa
				2=Cleared	[OctetString] Cleared:Alarm:Over Differential Pressure [Label] 650050000004087E
515	Alarm	Sensor	Under Differential Pressure	1=Active	[OctetString] Active:Alarm:Under Differential Pressure [Label]650050000004087E [Value]3.0Pa [Threshold]5.0Pa

Table 2.6 Liebert SNMP NotificationTraps Table (continued)

MIB / OID / NAME					
LIEBERT-GP-SYSTEM-MIB 1.2.6.1.4.1.476.1.42.3.7.8 IGPSYSEVENTNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPSYSEVENTDESCRIPTION (EXAMPLES)
				2=Cleared	[OctetString] Cleared:Alarm:Under Differential Pressure [Label] 650050000004087E
516	Warning	Sensor	Under Differential Pressure	1=Active	[OctetString] Active:Alarm:Under Differential Pressure [Label]650050000004087E [Value]0.0Pa [Threshold]5.0Pa
				2=Cleared	[OctetString] Cleared:Warning:Under Differential Pressure [Label] 650050000004087E

2.8 SNMP Alarm Traps

NOTE: For V1, the information in the State column is specific to the trap. For V2, the information in the State column is the suffix of lgpnotifications OID, e.g. .0.1 means Active.

Table 2.7 SNMP Alarm Traps

MIB / OID / NAME LIEBERT-GP-REGISTRATION-MIB .1.2.6.1.4.1.476.1.42.3.3 LGPNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPCONDITIONID/LGPCONDITIONDESCRIPTION
	Notification	System	Firmware Update Required	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4550 lgpCondId4550FirmwareUpdateRequired
	Notification	System	V2 Event Condition Added	1=Active	.1.3.6.1.4.1.476.1.42.3.3.0.1 lgpEventConditionEntryAdded
	Notification	System	V2 Event Condition Removed	1=Active	.1.3.6.1.4.1.476.1.42.3.3.0.2 lgpEventConditionEntryRemoved
47	Notification	System	Generic Test	1=Active	.1.3.6.1.4.1.476.1.42.3.2.1.4551 lgpCondId4551GenericTestEvent
100	Notification	System	Reboot	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.6194 lgpCondId6194SystemRebootCommandIssued
101	Notification	System	Firmware Update Start	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.6210 lgpCondId6210FirmwareUpdateInProgress
106	Notification	System	PDU Power on Reset	1=Active	.1.3.6.1.4.1.476.1.42.3.2.1.6450 lgpCondId6450PDUPoweredOn
109	Notification	System	Absent BRM	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4523 lgpCondId4523ModuleRemoved
110	Notification	System	New BRM	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4524 lgpCondId4524ModuleAdded
111	Alarm	System	Device Change Acknowledge Pending	1=Active	.1.3.6.1.4.1.476.1.42.3.2.1.4495 lgpCondId4495DeviceConfigurationChange
112	Notification	System	Absent Sensor	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.6204 lgpCondId6204SensorRemoved
113	Notification	System	New Sensor	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.6203 lgpCondId6203SensorAdded
114	Alarm	System	Too Many Sensors	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5423 lgpCondId5423TooManySensors
200	Alarm	PDU	Hardware Fault	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4502 lgpCondId4502PDUFailure
201	Alarm	PDU	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4470 lgpCondId4470PDUOverCurrentL3
201	Alarm	PDU	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4448 lgpCondId4448PDUOverCurrent
201	Alarm	PDU	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4468 lgpCondId4468PDUOverCurrentL1
201	Alarm	PDU	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4469 lgpCondId4469PDUOverCurrentL2

Table 2.7 SNMP Alarm Traps (continued)

MIB / OID / NAME LIEBERT-GP-REGISTRATION-MIB .1.2.6.1.4.1.476.1.42.3.3 LGPNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPCONDITIONID/LGPCONDITIONDESCRIPTION
202	Warning	PDU	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4470 lgpCondId4470PDUOverCurrentL3
203	Alarm	PDU	Low Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4473 lgpCondId4473PDUUnderCurrentL3
203	Alarm	PDU	Low Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4449 lgpCondId4449PDUUnderCurrent
203	Alarm	PDU	Low Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4471 lgpCondId4471PDUUnderCurrentL1
203	Alarm	PDU	Low Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4472 lgpCondId4472PDUUnderCurrentL2
204	Alarm	PDU	Unbalanced Load	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.5928 lgpCondId5928UnbalancedLoadCondition
205	Alarm	PDU	Over Current - Neutral	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.5524 lgpCondId5524PDUNeutralOverCurrent
206	Warning	PDU	Over Current - Neutral	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.5524 lgpCondId5524PDUNeutralOverCurrent
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.5780 lgpCondId5780PDUUnderVoltageL3L1
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5776 lgpCondId5776PDUUnderVoltageLN
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5777 lgpCondId5777PDUUnderVoltageLL
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5778 lgpCondId5778PDUUnderVoltageL1L2
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5779 lgpCondId5779PDUUnderVoltageL2L3
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5781 lgpCondId5781PDUUnderVoltageL1N
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5782 lgpCondId5782PDUUnderVoltageL2N
207	Alarm	PDU	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5783 lgpCondId5783PDUUnderVoltageL3N
208	Alarm	PDU	Neutral Voltage Fault	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.6221 lgpCondId6221NeutralVoltageFault
209	Alarm	Branch	Over Current - Residual	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.6693 lgpCondId6693BranchResidualOverCurrent

Table 2.7 SNMP Alarm Traps (continued)

MIB / OID / NAME LIEBERT-GP-REGISTRATION-MIB .1.2.6.1.4.1.476.1.42.3.3 LGPNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPCONDITIONID/LGPCONDITIONDESCRIPTION
209	Alarm	Receptacle	Over Current - Residual	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.6694 lgpCondlId6694ReceptacleResidualOverCurrent
211	Alarm	PDU	Over Current Protection	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.6527 lgpCondlId6527PDUOverCurrentProtection
211	Alarm	Branch	Over Current Protection	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5939 lgpCondlId5939BranchOverCurrentProtection
300	Alarm	Branch	Open Circuit Breaker CB Closed	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4494 lgpCondlId4494BranchBreakerOpen
302	Alarm	Branch	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4406 lgpCondlId4406BranchOverCurrent
302	Alarm	Branch	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4416 lgpCondlId4416BranchOverCurrent
302	Warning	Branch	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4416 lgpCondlId4416BranchOverCurrent
303	Warning	Branch	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4406 lgpCondlId4406BranchOverCurrent
304	Alarm	Branch	Low Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4407 2=Cleared lgpCondlId4407BranchUnderCurrent
304	Alarm	Branch	Low Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4417 lgpCondlId4417BranchUnderCurrent
305	Alarm	Branch	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.5784 lgpCondlId5784BranchLowVoltageLN
305	Alarm	Branch	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5785 lgpCondlId5785BranchLowVoltageLL
305	Alarm	Branch	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5948 lgpCondlId5948BranchLowVoltageLL
305	Alarm	Branch	Under Voltage	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5786 lgpCondlId5786BranchLowVoltage
306	Alarm	Branch	Loss of Load	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.6222 lgpCondlId6222BranchLoadLoss
307	Alarm	Branch	Hardware Fault	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.4421 lgpCondlId4421BranchFailure
400	Notification	Receptacle	Absent Load	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4508 lgpCondlId4508ReceptacleLoadRemoved
401	Notification	Receptacle	New Load	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4509 lgpCondlId4509ReceptacleLoadAdded
403	Alarm	Receptacle	Over Current	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4360

Table 2.7 SNMP Alarm Traps (continued)

MIB / OID / NAME					
LIEBERT-GP-REGISTRATION-MIB					
.1.2.6.1.4.1.476.1.42.3.3					
LGPNOTIFICATIONS					
CODE	TYPE	LEVEL	EVENT	STATE	LGPCONDITIONID/LGPCONDITIONDESCRIPTION
				2=Cleared	IgpCondId4360ReceptacleOverCurrent
404	Warning	Receptacle	Over Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4360 IgpCondId4360ReceptacleOverCurrent
405	Alarm	Receptacle	Low Current	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4361 IgpCondId4361ReceptacleUnderCurrent
406	Notification	Receptacle	Power ON	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4492 IgpCondId4492ReceptaclePowerStateOn
407	Notification	Receptacle	Power OFF	1=Active	.1.3.6.1.4.1.476.1.42.3.2.7.1.4493 IgpCondId4493ReceptaclePowerStateOff
500	Alarm	Sensor	High Humidity	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4588 IgpCondId4588OverRelativeHumidity
501	Warning	Sensor	High Humidity	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4588 IgpCondId4588OverRelativeHumidity
502	Alarm	Sensor	Low Humidity	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4589 [OID] IgpCondId4589UnderRelativeHumidity
503	Warning	Sensor	Low Humidity	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4589 [OID] IgpCondId4589UnderRelativeHumidity
504	Alarm	Sensor	Over Temperature	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4580 [OID] IgpCondId4580OverTemperature
505	Warning	Sensor	Over Temperature	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4580 [OID] IgpCondId4580OverTemperature
506	Alarm	Sensor	Under Temperature	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4581 [OID] IgpCondId4581UnderTemperature
507	Warning	Sensor	Under Temperature	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.4581 [OID] IgpCondId4581UnderTemperature
508	Alarm	Sensor	Open Door	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5471 [OID] IgpCondId5471DoorOpen
509	Alarm	Sensor	Open Contract	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5479 [OID] IgpCondId5479ContactClosureOpen
510	Alarm	Sensor	Close Contract	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.1.5480 [OID] IgpCondId5480ContactClosureClosed
511	Alarm	Sensor	Leak Detected	1=Active 2=Cleared	.1.3.6.1.4.1.476.1.42.3.2.7.1.6205 [OID] IgpCondId6205WaterLeakDetected







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