

■ Monitoring
For Business-Critical Continuity™

Liebert® RDU

High Availability Monitoring In The Rack Level



Liebert® RDU

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The Liebert RDU is a leading edge solution for infrastructure insight in the rack level. It provides monitoring ability for proactive management through remote access with the use of early warnings, user friendly reports, historical trending and predictive reports.

The Liebert RDU provides visibility of all system components of the rack. This enables review, real time monitoring as well as insight into the system performance allowing users to effectively manage the IT Infrastructure.

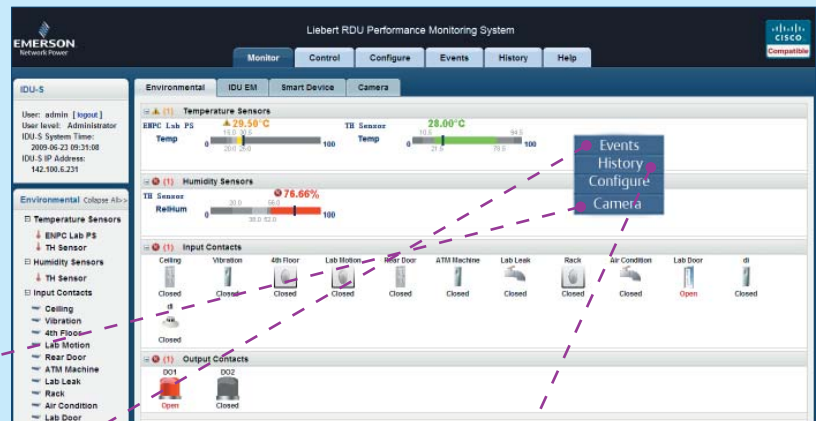


It allows the user to:

- Set predefined thresholds
- Detect and be notified of critical conditions within the computer room and individual rack level such as temperature and humidity irregularities
- Export historical data and analyze for trends to help avoid the same issues in the future

Maximum Visibility and Escalation

1 FIND OUT WHAT IS GOING ON: Go To User Screen



2 RECORD: Remote view and capture the incident on video



3 REACT: Troubleshoot by viewing related events and anticipate other possible issues



4 PLAN: Proactive short term and long term planning / trending



Maximum Visibility For Insight Into The Infrastructure

What the Liebert RDU can help you find out

- Security
Has somebody accessed the rack or entered the computer room?
- Temperature
*Is your rack getting too hot?
What is the humidity status in the rack?*
- Smoke / Fire
Is there smoke or fire in the rack or the room?
- Water Leaks
Is there water present in the rack or the room?
- PDU Management
What is the total power accumulated by the PDU?

The Liebert RDU Family

- Liebert RDU-S
- Liebert RDU-SIC

Accessories for Maximum Visibility

- Camera: Monitor equipment in the room with USB port
- Sensors
 - Vibration
 - Smoke
 - Temperature
 - Temperature and Humidity
 - Water
 - Door
 - Motion
- Liebert MPS: Monitor power consumption
- Alarm Beacon: Flashing LED beacon provides visual event notification
- 3-Way Connector/splitter : Provides 'daisy chain' sensor additions using standard RJ45 cables
- Mounting Magnet: Allows magnetic mounting of sensors or alarm beacons

Accessories



**Temperature/
Humidity Sensors**
Monitor room
temperature
and humidity



Alarm Beacon
Flashing LED beacon
provides visual
exception event
notification



Water Stripe Sensor
Detects water
perimeter leakage



Motion Sensors
Monitor the
movement in the
room



USB Cameras
Monitor equipment
in the room with USB
port



Mounting Magnet
Allows magnetic
mounting of sensors or
alarm beacons



**Water Detection
Sensors**
Monitor water
leaks in the room
or cabinet



Door Sensors
Monitor if the
door is open or
closed



Camera Night Vision
Monitor equipment in the
room via USB communication
with night vision capabilities



Smoke Sensors
Monitor fire /
smoke in the
room or cabinet



Vibration Analyser
Monitor minor or
major vibrations of
objects in the room



3-Way Connector/splitter
Provides 'daisy chain'
sensor additions using
standard RJ45 cables



Vibration Sensor
Monitors and detects
vibration

How it works

- Customer sets threshold for environmental factors (e.g. Rack/Room Temperature, Humidity)
- An Email and/or SMS is sent to customers when issues are detected.
- The data monitored is recorded in XML dataformat allowing export to third party applications such as databases, spreadsheets, etc.
- It also records all critical systems condition in data and event log which can then be used for capacity planning and trending.

In an enterprise environment where multiple Liebert RDU-S are installed in one or multiple sites, Liebert Nform 4 software can provide centralized monitoring, control of RDU-S, alarm management, trend analysis, and event notification.



Technical Specifications

Product Names	Liebert RDU-S				
Part Number	02311746				
Connectors					
Input Power Connector	IEC C14				
Ethernet Connector	(1) RJ-45				
Micro SD	1				
USB for Modem	1				
USB for Camera	2				
Digital input	(3) RJ-45				
TH_BUS port	(1) RJ-45				
Serial Comport	2 for serial PDU connection				
Digital Output	2				
DC Output	(2) 12VDC				
# of Temp Sensor Allowed	8				
# of T/H Sensor Allowed	8				
# of Camera Allowed	2				
# of Digital Input Allowed	12				
Sensors	Liebert RDU-S				
Temperature Sensor	02311725				
Temperature/Humidity Sensor	02311720				
Comport Device	Liebert RDU-S				
Liebert MPS PDU - Switched	14240048	14240060	14240061	14240064	14240065
Liebert MPS PDU - Metered	14240046	14240058	14240059	14240062	14240063
Digital Input Sensors	Liebert RDU-S				
Door Sensor	33010342				
Motion Sensor	33040015				
Smoke Sensor	33010441				
Leak Spot Sensor	33010322				
Vibration Analyzer	33010331				
Vibration Detector	33010330				
Water Stripe Sensor 5m	33010326				
Water Stripe Sensor 10m	33010328				

USB Device		
GPRS Modem	*50030072	
Camera Panning and Tilting	51060034	
Camera Night Vision	51060033	
Digital Output Sensor		
Alarm Beacon	33010442	
Supported Protocol		
HTTP/HTTPS	Yes	
DHCP	Yes	
SNMP	Yes	
TFTP	Yes	
FTP	Yes	
Upgradable Firmware	Yes	
Supported Monitoring Software	Liebert Nform	
Package Content		
Power Cable IEC C13-C14	1	
Circuit Pothook	2	
Mounting Bracket	2	
Screws	Yes	
Quickstart Guide	1	
Input Power	100VAC-240VAC	
Power Consumption	30W	
Dimension (WxHxL, mm)	440x44x55	
Net Weight (kg)	<1.5Kg	
Color	Black, RAL7021	
Standard Warranty	1 year	

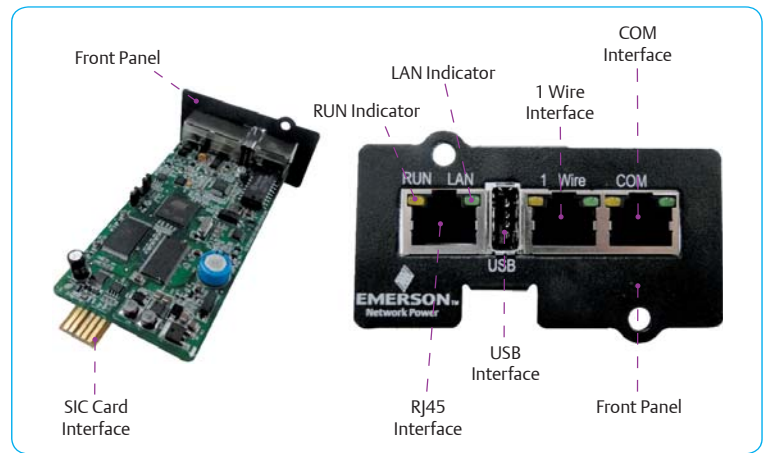
* GPRS Modem (50030072) - 2G GPRS Modem which can be ordered through Emerson. If this is not available through your local Emerson office, the following 3rd party 3G GPRS Modems can be used as alternatives: Huawei E173-1u, Huawei E153, Huawei E1553

Liebert® RDU-SIC

Best in Class Monitoring For Rack Type UPS

The Liebert RDU-SIC is an ideal monitoring and management solution for rack type UPS devices (compatible with Liebert ITA and Liebert GXT3) and precision air conditioning units like Liebert DM3000. It features an environmental monitoring capability that can accept signals from a Liebert temperature or a temperature/humidity combo sensor.

The Liebert RDU-SIC provides virtual management of the UPS and its surroundings by monitoring environmental conditions and the rack type PDU's status.



It allows the user to:

- Set predefined thresholds
- Detect and be notified of critical conditions for parameters such as temperature and humidity within UPS surrounding or individual racks
- Export historical data and analyze for trends to help avoid the same issues in the future
- Monitor and/or control Rack PDUs

Enhancing Power Protection Through Efficient UPS Management

The Liebert RDU-SIC is a network management card that has the ability to communicate with a Liebert UPS, power distribution units and Liebert DM through network communication. It can also connect to the environment monitoring equipment, including IRM series temperature sensor, temperature & humidity sensor, Liebert MPS Switched & Metered PDU.

Equipped with an intelligent equipment alarm, it notifies the user through sending a trap message, sending an E-Mail or SMS. The Liebert RDU-SIC card provides four approaches to monitor the UPS or PACU equipment and the room environment through:

- **Web Browser** - Monitor your equipment and the room environment through the Web server function provided by the SIC card.
- **Network Management System (NMS)** - Monitor your equipment and the room environment through the SNMP agent function provided by the SIC card.
- **SiteMonitor** - SiteMonitor is a piece of network management software designed to monitor equipment room power and environment through the TCP/IP interface provided by the SIC card.
- **Centralized Management Software (Liebert Nform)** - Monitor your equipment and the room environment through the Velocity Server service function provided by the SIC card.

The Liebert RDU-SIC card can also work with the Network Shutdown computer safe shutdown program developed by Emerson Network Power to provide automatic and safe shutdown function for your computer to prevent data loss.

Liebert RDU-SIC Technical Specifications

Product Names	Liebert RDU-SIC				
Part Number	02311646				
Ports					
Ethernet	1 - RJ45 port				
USB	1 - For Baiyi-181M 2G Modem Only. P/N 50030072				
Serial	1 - For Temperature Sensor, Temperature/Humidity Combo, or Switched / Metered PDU				
# of Temp or Temp/Humid Sensor/Combo Sensor or PDU	4 Devices Maximum				
Temperature Sensor	02311725				
Temperature/Humidity Sensor	02311720				
Liebert MPS PDU - Switched	14240048	14240060	14240061	14240064	14240065
Liebert MPS PDU - Metered	14240046	14240058	14240059	14240062	14240063
Protocols Supported	HTTP, HTTPS, SNMP v1 and v2c, TFTP				
Supported Monitoring Software	Liebert Nform				
Net Weight (kg)	500g				

Liebert RDU-SIC Supported Equipment

TYPE	Device Model
UPS	Liebert ITA
	Liebert GXT3
AC	Liebert DM3000
Transfer Switch	16A LTS

Remote Management Capability

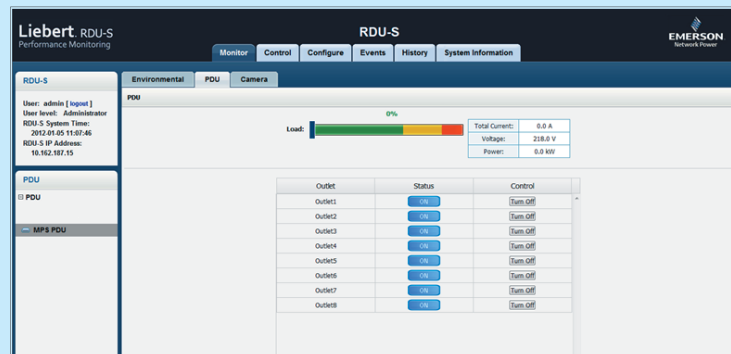
Liebert RDU PDU Management

Liebert RDU is also capable of managing Power Distribution Units. This can either be a Metered PDU that can display real time branch-level electrical parameters in the web page of the RDU or a Switched PDU that provides the same features as the metered with the additional capability of remotely controlling the individual receptacles and configuring sequential start-ups of the receptacles.

Liebert MPS PDU



PDU Main Screen Thru Liebert RDU Connection



Ensuring Optimum Performance of your Liebert RDU

Liebert RDU Service Packages

While the Liebert RDU presents a cutting-edge solution for your monitoring requirements, it is also important to consider and remember Emerson Support Packages to put your equipment at optimum level. The Liebert RDU have service packages that may be purchased to protect and maintain your infrastructure insight equipment.



Start Up

- User is no longer required to be involved on Liebert RDU deployment
- Guaranteed utilization of equipment at agreed schedule
- Hassle free initial installation



FW Upgrade Support

- Available upgrade of newer versions when available
- Enables unit to add new functionality
- Product and Feature improvements apart from bugs and errors correction



On-Site Labor

- Highly trained Service Engineers to troubleshoot, diagnose and fix the bugs in the system
- Promotes convenience and peace of mind



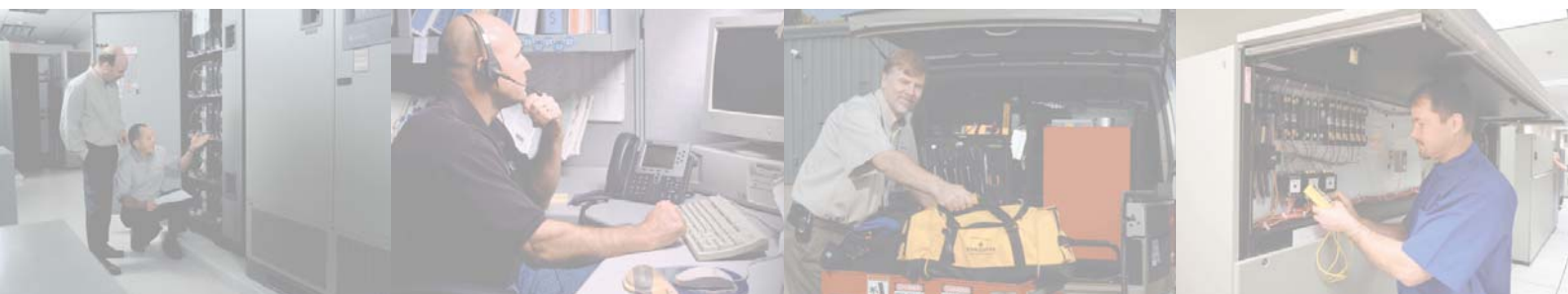
Preventive Maintenance

- Increased reliability on the equipment
- Continued uptime at optimum performance



Extended Warranty

- Lower Total Cost of Ownership
- Avoid surprise expenses on maintenance
- Cost protection on parts, labor and product updates



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F: 92-42-36622530

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