Liebert[®] RDU501

Intelligent Infrastructure Management Solution

Features

The Liebert® RDU501 allows data center managers to perform the following operations through a secure web page:

- Monitoring of the health and status of the equipment
- Access server Service
 Processor
- Out-of-band and Serial Console management
- Monitor the improved communication speed in transmitting control or commands to the equipment and parameter setting

3rd Party Communications:

- SNMP
- Modbus 485
- Dry contacts
- Analog Signals

The Liebert® RDU501 is an intelligent infrastructure management solution from Vertiv that allows data center administrators to monitor environmental conditions and infrastructure appliances such as UPS, precision cooling units, generator sets, etc.

The Liebert® RDU501 is equipped with a built-in web server, automated IT server shutdown and out-of-band management to offer the customer compete control over the datacenter infrastructure. RDU501 can also manage the server's Service Processor.





The Liebert® RDU501 serves as the communication gateway for the equipment and the Liebert® RDU-M and Smart InfraSight solutions.. It intelligently collects and communicates data and commands, giving IT administrators a comprehensive view of what's happening at the equipment level of the facility.

Infrastructure Management

- 1. Modbus 485 and/or SNMP Communications
 - **Default of 32 devices** in an RDU module (Can be all Modbus 485, or all SNMP, or a Mix).
 - Can be extended to have additional 32 devices more by purchasing licenses to make the total to a maximum of 64.
 - Each COM port can support a maximum of 4 daisy chained connection (need to be same device) BUT maximum PER device will still be 64 devices.

Note: If communicating to a 3rd party device, will need to get SNMP MIB File for SNMP communication and Modbus Reference Library for Modbus communication to build driver. This will incur additional charges.



Modbus 485 Communications

RDU501 Module

Out-of-Band Service Processor and Serial Console Management

- The RDU501 provides in-band and out-of-band access to the server's service processor. Since the service processor doesn't need to be accessed directly via the network, it provides an additional level of security and accessibility – reducing risk without losing functionality.
- The RDU501 can also cost efficiently manages multiple serial consoles, reducing operator complexity and resources.





Environmental:

- 1. Temp and Temp/Hum Sensor
 - By default (without the optional THUB) it can support up to 32 sensors
 - When THUB is connected, total maximum will be 80 sensors
 - Sensor Port 1 can only support Temp and/or Temp/Humid Sensor (max 16)
 - Sensor port 2 supports 16 knots. When 2 x 4DIF sensors are connected with all of the ports used, this will be considered as 10 knots (2x4DIF + 8 Sensors), the remaining 6 knots can be used for T /TH sensors.

Note: Each knot is considered to be 1 Sensor EXCEPT for the Smoke and Infrared Sensors which is considered to be 4 knots each.



- 2. Digital Input Sensor (Door Sensor, Water Leak Sensor, Smoke Sensor, Motion Sensor, Vibration Sensor)
 - By default (without the optional 8DIAI Extension card) it can support up to 12 (8 of the 12 will be coming from 4DI sensor connected to the Sensor 2 Port).
 - When 4 pieces of 8DIAI cards are connected, maximum of 44 Digital Input Sensors
- 3. Analog Input Sensor
 - Maximum of 16 inputs using 4 pieces of 8DIAI optional card
- 4. Analog Output
 - Maximum of 32 outputs using 4 pieces of 8DOAO card
- 5. Digital Output
 - Maximum of 18 (2 default digital output + 32 from 4 pieces of 8DOAO card)

Note: When using Smoke and Infrared Sensors, it is considered to be 4 knots each or an equivalent of 4 sensors each.

Video surveillance

- 1. Directly connect 1 x IP Camera
- 2. Connect 4 x IP Cameras via NVR





Mechanical Specifications

External Model	Measurement	Valve
RDU501	Height	43.5mm
	Width	440mm
	Depth	455mm
	Weight	10kg
IRM-4COM IRM-8DIAI IRM-8DOAO	Height	20mm
	Width	152mm
	Depth	199mm
	Weight	1kg

Environment Conditions

Item	Requirement	
Application location	Usually in data center or computer room, with air conditioner	
Working temperature	0°C ~ +60°C	
Relative humidity	5%RH ~ 95%RH, no condensing	
Working environment	Dust: compliant with the indoor requirements of GR-63. No corrosive gas, flammable gas, oily mist, steam, water drops or salt	
Air pressure	70kpa ~ 106kpa	
Storage temperature	-20°C ~ +70°C	
Cooling	Natural cooling, fan-less design	
Power distribution network	TT/TN	
Protection level	IP20	

Performance Specifications

Ports	Cable standard	Distance (unit: m)
SENSOR1	Standard category 4 twisted-pair cable	≤ 100
SENSOR2	Standard category 4 twisted-pair cable	≤ 100
DI ports	Standard category 4 twisted-pair cable	≤ 100
DO ports	Standard category 4 twisted-pair cable	≤ 100
COM ports	Standard category 4 twisted-pair cable	≤ 100

Product Certificate: RDU501 satisfies CE allege, UL, CE, FCC and RoHS R10.

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