MWOC-RMU Series

Remote Management Unit (RMU)

PRODUCT OVERVIEW

The MWOC-RMU is a Remote Management Unit (RMU) for the MWOCS series, supports OCP system power shelves. The MWOC-RMU can monitor and control PSUs and peripherals installed in our power shelves, such as the MWOCES-211, MWOCES-192, and MWOCES-191, via PMBus™. The MWOC-RMU communicates with the host system over Ethernet using SNMP. Furthermore, the latest MWOC-RMU-3 also supports communication via Redfish and Modbus. The MWOC-RMU has LED status indicators, two (2) x RJ45 connectors and it is hot swappable and provides detailed communication and reporting for datacenter applications.

FEATURES

- RMU for Power Shelf Applications
- Communicates internally via PMBus™
- Communicates externally via SNMP, *Redfish and *Modbus (* MWOC-RMU-3 only)
- LED Status Indicators
- Two (2) RJ45 Connectors
- Measurement data can be displayed graphically
- Available for Web API
- 2-year warranty

https://www.murata.com/products/power

For full details go to www.murata.com/rohs

ORDERING GUIDE

Part Number	Function	Applicable shelf
MWOC-RMU-2	Monitor and Control Unit	MWOCES / MWDCES series
MWOC-RMU-3	Monitor and Control Unit	MWOCES / MWDCES series

RJ45 INTERFACE

Port	MWOC-RMU-2	MWOC-RMU-3
1	Ethernet(100BASE-TX)	Ethernet(1000BASE-T)
2	Serial Console(RS-232C)	

NETWORK PROTOCOLS (Port 1)

Protocol	MWOC-RMU-2, 3
IP	Ver. 4
DHCP client	Ver. 4
DNS client	Available
SNMP agent	Ver. 1 (RFC1155) MurataRMU-MIB available
telnet server	NA
SSH v2 server	Available for CLI
HTTP server	Available for Web GUI
Syslog	BSD format (RFC3164)
NTP client	SNTP Ver. 4

SERIAL-PORT PROTOCOLS (Port 2)

Feature	MWOC-RMU-2, 3
Serial console	Available same CLI as SSH2

FUNCTION AVAILABLE WITH MWOC-RMU-2, 3

Application	Action	Description
CLI	Control the unit	In addition to SNMP, ON/OFF control of installed PSUs
	Report to the host	Same as SNMP
	RMU configuration	Set RMU's IP address (selectable "Static" or "DHCP")
	SNMP configuration	Set Trap receiver's IP address Set Community names
	DNS configuration	Set DNS server's IP address
	NTP configuration	Set NTP server's hostname or IP address
	Time configuration	Select a time zone Set daylight saving time
	Syslog configuration	Set SYSLOG server's hostname or IP address
	User configuration	Available commands depend on the user's role

FUNCTION AVAILABLE WITH MWOC-RMU-2, 3		
Application	Action	Description
SNMP	Control the unit	ON/OFF control of installed PSUs Selection of the power source
	Reporting to the host	ON/OFF Status of each unit Presence information of each unit Status of input power sources Fault information of each PSU Input / Output power of PSUs
Syslog	Send log messages to the host	Send log messages of following events: Occurrence or recovery of alarms Operation of each unit
Event Log	Store log messages to the internal flash	Store same events as Syslog
Web GUI	DNS configuration	Same as CLI
	NTP configuration	Same as CLI
	Time configuration	Same as CLI
	Syslog configuration	Same as CLI
	IP configuration	Same as CLI
	SNMP configuration	Same as CLI

FUNCTION AVAILABLE WITH MWOC-RMU-3		
Application	Action	Description
CLI	Time configuration	Select an IANA's time zone
Web API	T.B.D	Compliant with Redfish API

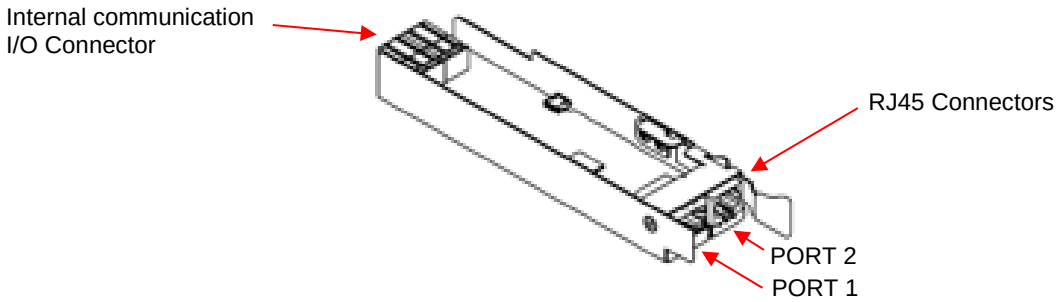
ENVIRONMENTAL CHARACTERISTICS					
Parameter	Conditions	Min.	Typ.	Max.	Units
Storage temperature range		-40		70	℃
Operating temperature range		0		40	℃
Storage humidity	Non-condensing	5		90	%RH
Operating humidity	Non-condensing	5		85	%RH
Altitude (without derating at 40℃)				3,000	m
MTBF	Per Telcordia SR-332 M1C1 @ 40℃	400k			hrs
Shock	30G non-operating				
Vibration	Operating, random vibration, 5-500Hz 1.11G				
Weight	130g				

STATUS INDICATION AND CONTROL SIGNAL WITH MWOC-RMU-2		
LED	Function	Status
LED1	Link	Blinking Green: Communication with host via LAN1 is available
LED2	Power	Solid Green: RMU powered up
LED3	Alarm	Solid Amber: One or more alarms occurred in the power shelf
LED4	For internal use	-

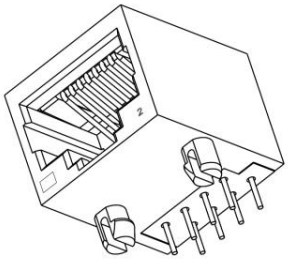
STATUS INDICATION AND CONTROL SIGNAL WITH MWOC-RMU-3		
LED	Function	Status
LED0	Link	Solid Green: Communication with host via LAN1 is available
LED1	Link	Solid Yellow: 1000Base-T is available
LED2	Power	Solid Green: RMU powered up
LED3	Alarm	Solid Amber: One or more alarms occurred in the power shelf

Link back to product description

CONNECTORS



RJ45 CONNECTOR PIN ASSIGNMENT (PORT 1) WITH MWOC-RMU-2



Pin	Signal	Description
1	TXD+	Sending data (+)
2	TXD-	Sending data (-)
3	RXD+	Receiving data (+)
4	-	-
5	-	-
6	RXD-	Receiving data (-)
7	-	-
8	-	-

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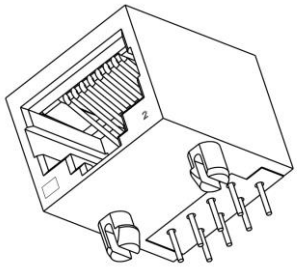
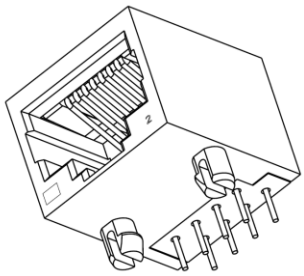
RJ45 CONNECTOR PIN ASSIGNMENT (PORT 2) WITH MWOC-RMU-2



Pin	Signal	Description
1	RTS	Hardware flow control data
2	+5V	Power supply for an optional part.
3	TXD	Sending data
4	GND	-
5	GND	-
6	RXD	Receiving data
7	-	-
8	CTS	Hardware flow control data

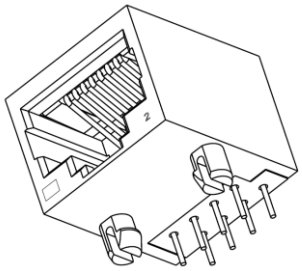
Note: A Cisco compatible console cable can be applied to PORT 2.

RJ45 CONNECTOR PIN ASSIGNMENT (PORT 1) WITH MWOC-RMU-3



Pin	Signal	Description
1	TP0+	Bi-directional data +
2	TP0-	Bi-directional data -
3	TP1+	Bi-directional data +
4	TP2+	Bi-directional data +
5	TP2-	Bi-directional data -
6	TP1-	Bi-directional data -
7	TP3+	Bi-directional data +
8	TP3-	Bi-directional data -

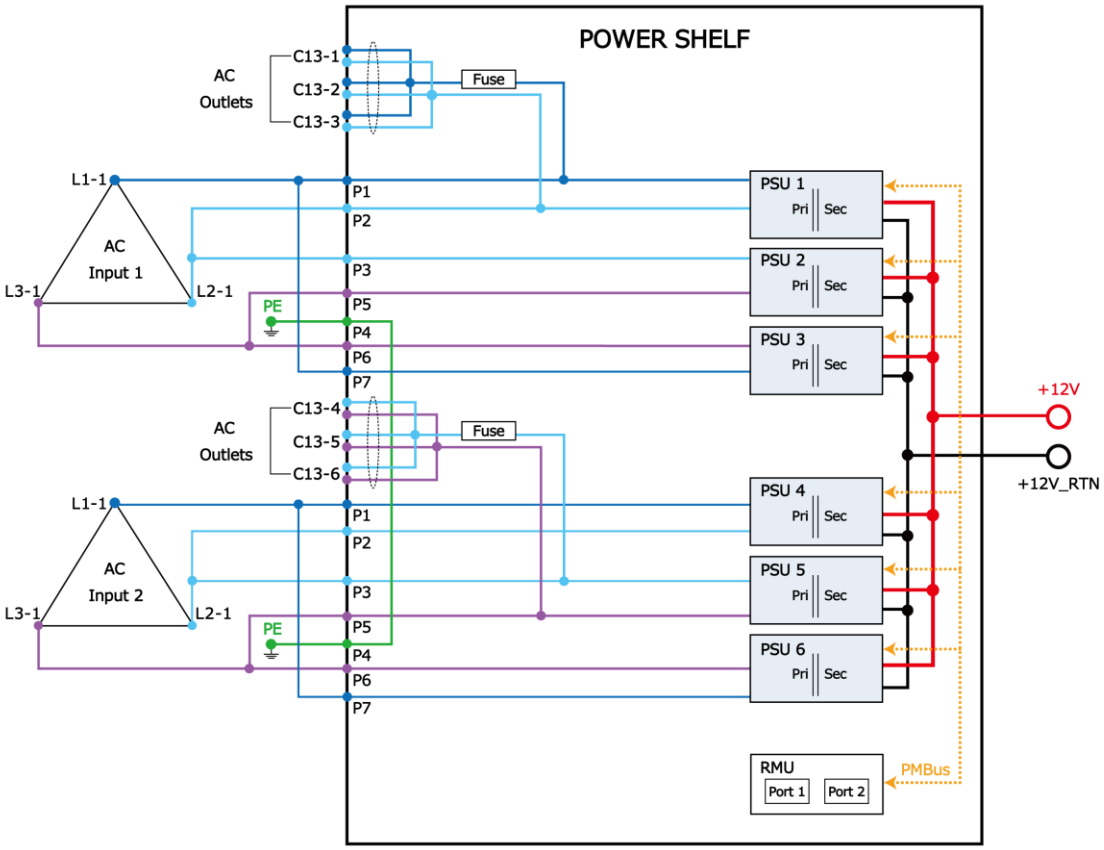
RJ45 CONNECTOR PIN ASSIGNMENT (PORT 2) WITH MWOC-RMU-3



Pin	Signal	Description
1	-	-
2	+5V	Power supply for an optional part.
3	TXD	Sending data
4	GND	-
5	GND	-
6	RXD	Receiving data
7	-	-
8	-	-

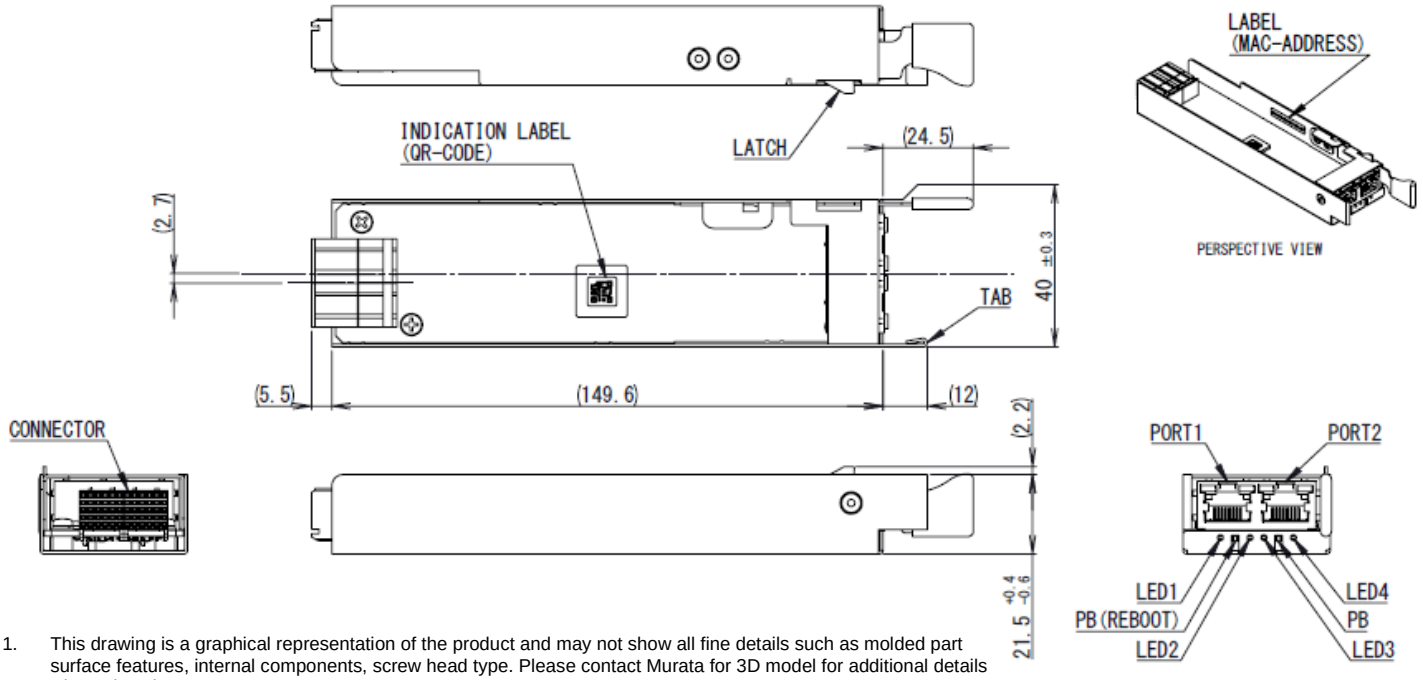
Note: A Cisco compatible console cable can be applied to PORT 2.

SHELF FUNCTIONAL BLOCK DIAGRAM (MWOCES-192-M Delta connection SHOWN)



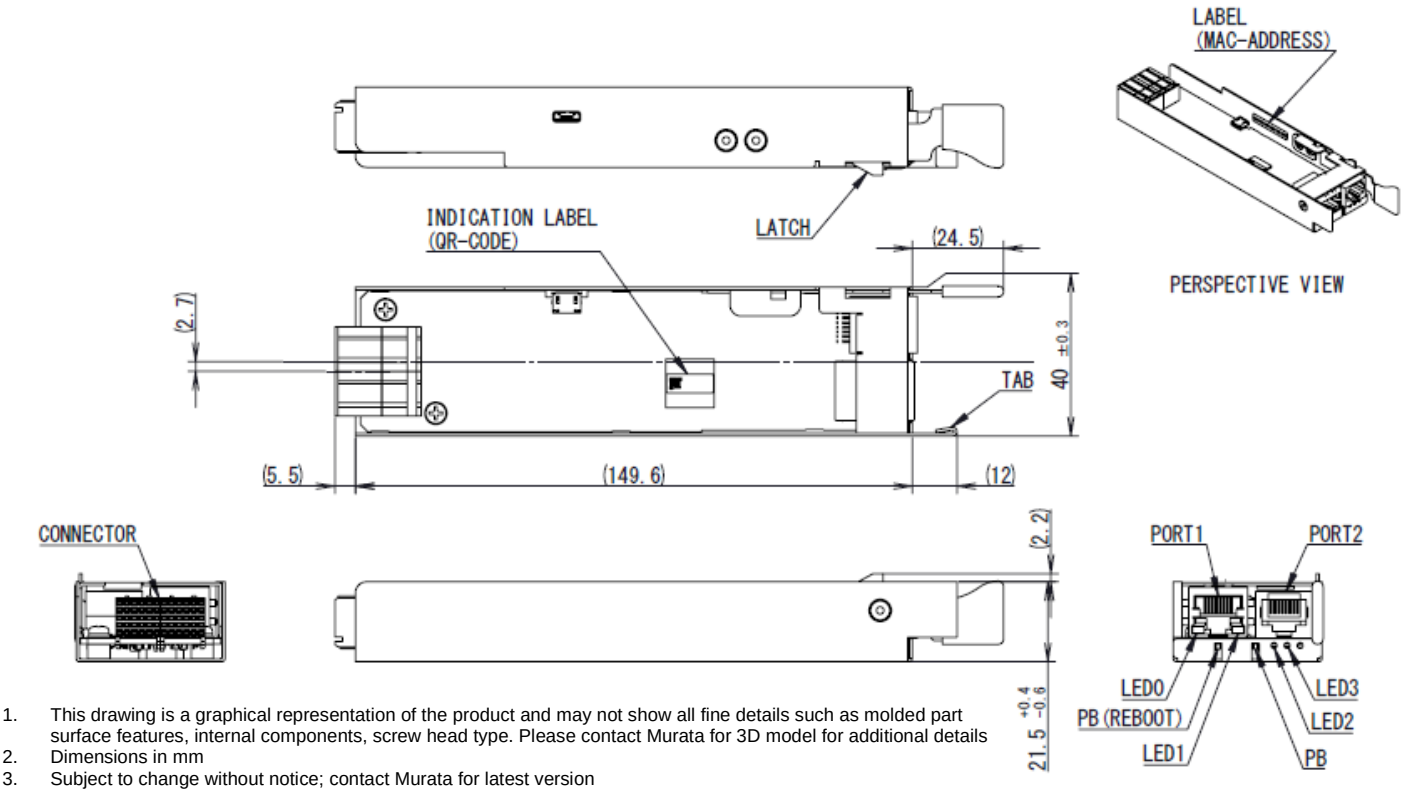
MECHANICAL DRAWING

MWOC-RMU-2



1. This drawing is a graphical representation of the product and may not show all fine details such as molded part surface features, internal components, screw head type. Please contact Murata for 3D model for additional details
2. Dimensions in mm
3. Subject to change without notice; contact Murata for latest version

MWOC-RMU-3



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RELATED PRODUCT DATASHEETS		
Document Number	Description	Click link below to open online datasheet
MWDCES-191-C	19” OCP Power Shelf	Link to: Datasheet
MWOCES-191-M-B		Link to: Datasheet
MWOCES-191-P-C		Link to: Datasheet
MWOCES-191-P-D		Link to: Datasheet
MWOCES-192-A		Link to: Datasheet
MWOCES-192-M		
MWOCES-211-F	21” OCP Power Shelf	Link to: Datasheet
MWOCES-211-G		
MWOCES-211-P-C		Link to: Datasheet
MWOCES-211-P-D		Link to: Datasheet
MWOCES-211-P-C-S		Link to: Datasheet

Murata Power Solutions, Inc.
129 Flanders Road
Westborough, MA 01581
ISO 9001 and 14001 REGISTERED

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https://www.murata.com/requirements/

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