



Features

- RFID readers in Sensorbar identify RFID tags on patch cords
- Contactless identification
- Sensorbars mounted on compatible standard R&M panels
- RFID Tags mounted on standard R&M patch cords
- Copper and Fiber optics
- Compatible with the R&M *IntelI*Phy Manage Advanced Cabling Management Solution

Sensorbars

Compatible panels	R&M HD panel R&M 19" 1U PC Patch Panel 24xRJ45 Cat 6A EL R&M 19" UniRack 2 R&M 19" FibereasyRack 2	
Port identification	1 LED per port	
Mounting	Snap-on, retro-fit	
Power consumption	12V / 150mA max, powered through bus cable	
MTTF	> 100 years (48 port) > 110 years (24 port)	
EMC	2004 / 108 / EC	
Conformance	CE	
Environment	WEEE, ROHS, REACH	
Environmental conditions		
Operating temperature	0°C to +40°C	IEC 60721-3-3 Class 3K1
Relative humidity	0% - 95% non-condensing	IEC 60721-3-3 Class 3K1
Altitude	0 m - 15'000 m	IEC 60721-3-3 Class 3K1
Vibration and shock	Stationary and non-stationary vibration, including shock	IEC 60721-3-3 Class 3M1

Analyzer

Protocols	Ethernet, TCP/IP, SNMPv1, SNMPv2, SNMPv3	
Management	Managed through R&M <i>MinteliPhy</i> Manage. Local configuration and status information through web-based graphical user interface.	
Powering	External AC power adapter	
MTTF	> 90 years	
Power supply to bus cable	12V / 6A max. (depends on power adapter)	
EMC	2004 / 108 / EC	
Conformance	CE	
Environment	WEEE, ROHS, REACH	
Environmental conditions		
Operating temperature	0°C to +40°C	IEC 60721-3-3 Class 3K1
Relative humidity	0% - 95% non-condensing	IEC 60721-3-3 Class 3K1
Altitude	0 m - 15'000 m	IEC 60721-3-3 Class 3K1
Vibration and shock	Stationary and non-stationary vibration, including shock	IEC 60721-3-3 Class 3M1
19" Analyzer		
Dimensions and Weight	44.45 x 485 x 171 mm, 2.7 kg	
Material and Color	Sheet metal, Black RAL 9005	
Mounting	19" cabinet (1U)	
Power consumption	1.8W max	
User interfaces	3 x LED, Backlit LCD display 2 x 40 characters, 1 x function button, 1 x reset button	
Interfaces	1 x Bus cable, 1 x Ethernet, 2 x USB host, 1 x RS-232, 1 x rack lamp	
Compact Analyzer		
Dimensions and Weight	150 x 93 x 35 mm, 0.2 kg	
Material and Color	ABS, Black RAL 9005	
Mounting	DIN-Rail, inside cabinet	
Power consumption	1.0W max	
User interfaces	3 x LED, 1 x function button, 1 x reset button	
Interfaces	1 x Bus cable, 1 x Ethernet, 1 x USB host	

Interface to R&M *MinteliPhy* Manage

Hardware	Processor 2.5 GHz, RAM 4 GB, Harddisk > 1 GB available
Operating system	Windows Server 2003, 2008, 2012 (32 or 64 bit), .NET 3.5 or higher

Analyzer Remote Display

Compatibility	19" Analyzer, Compact Analyzer	
Dimensions and Weight	44.45 x 485 x 171 mm, 1.8 kg	
Material and Color	Sheet metal, Black RAL 9005	
Mounting	19" cabinet (1U)	
Power consumption	1.8W max	
User interfaces	3 x LED, Backlit LCD display 2 x 40 characters, 1 x function button with LED ring	
Interfaces	1 x Bus cable	
Powering	Through bus cable or galvanically insulated external AC power adapter	
MTTF	> 170 years	
Power supply to bus cable	12V / 5A max.	
EMC	2004 / 108 / EC	
Conformance	CE	
Environment	WEEE, ROHS, REACH	
Environmental conditions		
Operating temperature	0°C to +40°C	IEC 60721-3-3 Class 3K1
Relative humidity	0% - 95% non-condensing	IEC 60721-3-3 Class 3K1
Altitude	0 m - 15'000 m	IEC 60721-3-3 Class 3K1
Vibration and shock	Stationary and non-stationary vibration, including shock	IEC 60721-3-3 Class 3M1

External AC Power Adapter, 10W

Power input	100 – 240 VAC, 47 ~ 63 Hz	
Primary plug	Interchangeable USA, UK, Australia, Europe	
Power output	12VDC, 850 mA max (5 Sensorbars)	
Output cable	1.8 m with 2.1 x 5.5 x 5.5 mm right angle DC plug	
Insulation	EN 60950	
EMC	EN 55011 Group I Class B, EN 61000-6-1	
Certifications	CE, UL, ROHS	
Dimensions and weight	72 x 46 x 35 mm, 130 g	

External AC Power Adapter, 60W galvanically insulated

Power input	100 – 240 VAC, 47 ~ 63 Hz	
Primary plug	IEC 60320/C8. Includes Power Cord Euro – C7	
Power output	12VDC, 5A max	
Output cable	0.7 m with 2.1 x 5.5 x 5.5 mm right angle DC plug	
Insulation	4 KV, EN 60950	
Safety	IEC 60601-1, ICC 609501-1, Safety Class II	
EMC	EN 55011 Group I Class B, EN 61000-3-2 Class A	
Certifications	CE, UL, ROHS	
Dimensions and weight	132 x 58 x 31 mm, 345 g	

External AC Power Adapter, 70W

Power input	100 – 240 VAC, 50 ~ 60 Hz
Primary plug	IEC 60320/C14. Includes Power Cord Schuko – C13
Power output	12VDC, 5.5A
Output cable	0.7 m with 2.1 x 5.5 x 5.5 mm right angle DC plug
Insulation	EN 60950
EMC	EN 55011 Group I Class B, EN 61000-6-1
Certifications	CE, UL, ROHS
Dimensions and weight	125 x 58 x 31 mm, 345 g

Bus cable

Construction	Ribbon cable 6 x AWG26
Connectors	Erni Mini-Bridge, field mounted
Topology	Daisy chain with 100Ω termination on both ends
Protocol	RS485
Length	25 m max.
Current carrying capacity	6A max.
EMC	2004 / 108 / EC
Environment	WEEE, ROHS

Bus cable length

The table below shows the number of Sensorbars that can be connected to each bus cable segment. One bus cable segment is the cable between

- the Analyzer and the bus termination or
- the Analyzer and a Powered Remote Display or
- two Powered Remote Displays or
- the last Powered Remote Display on the bus and the bus termination

The table is valid if the Analyzer is powered through the external 70W power adapter and the Powered Remote Displays are connected to external galvanically insulated 60W power adapters.

Number of Sensorbars (Note 1)	Maximum bus cable segment length
42	2.5 m (Note 2)
35	5 m
30	10 m
25	15 m
18	20 m
15	25 m

Note 1: If Remote Displays are powered through the bus then the number of Sensorbars has to be decreased by 1 for each Remote Display

Note 2: 42 Sensorbars on a bus cable segment are only supported if the segment is powered by the Analyzer (and its 70W power adapter)

RFID clips

Compatible patch cords	R&M RJ45, LC-Duplex, E-2000™ simplex, SC simplex, MPO/MTP
Mounting	Snap-on, retro-fit, tool-less mounting
RFID	ISO 15693, 13.56 MHz