MCR1900 Modular Chassis System

19-module chassis for Media Converters and Ethernet Extenders

- High density 19-slot system
- Fits a standard 19” or 23” rack – 2U height
- **Hot-swappable slide-in modules**
- Redundant hot-swappable AC and 48v DC power supplies

The **Perle MCR1900 Media Converter Chassis** is the most reliable high density modular chassis system available today. It is ideal for enterprise and campus environments where multiple points of copper and/or fiber integration are essential. An end-to-end **copper to copper**, **copper to fiber**, **multimode to single mode** or **multimode to multimode** solution can be achieved by pairing modules in this high density chassis with another Perle MCR1900 chassis **standalone media converters**, or **standalone Ethernet extenders**. Management of Media Converter Modules and chassis can be performed with the addition of a chassis management module. For a low to mid density solution, please check out the **MCR200 Media Converter Chassis**.

For those environments requiring a medium to large-scale deployment of media converters, a centralized platform that simplifies the configuration, administration, monitoring, and troubleshooting of this gear is recommended. **PerleVIEW Device Management** software is a multi-user, Windows server-based application that delivers this level of Enterprise-grade solution.

MCR1900 Media Converter Chassis Features

High Density Media Converter Platform

Insert up to 19 modules into a single 2U chassis. The modules share a common power source.

Rugged Chassis Design

- U-channeled card cage provides high torsional rigidity
- Unified design between chassis slot and module faceplates provide additional chassis strength
- Redundant vertical supports ensure that slot alignment remains accurate enabling easy card insertion and removals over time
- Advanced card guide design along with 32 pin DIN 41612 connectors offer better card mating accuracy for reliable module additions and changes
- Made with zinc coated cold-rolled steel offering excellent corrosion resistance
- Extra ventilation slots on module face plates provide cooler operation and longer life
- Multi channel air flow for improve card cooling
- Auto-Thermal Shutdown Protection should internal temperature threshold be exceeded

Hot-Swappable modules

Modules can be inserted and removed with no impact to the rest of the system. Upon insertion the module will automatically be powered up and begin functioning. Modules can be placed in any slot and in any order.

Power Supply Failover

On dual power supply configurations, the load sharing power supplies provide instant failover should a power supply or power source fail. A single power supply can provide more than sufficient power for a fully loaded system.

Intelligent Alarm Relay

A backplane controller provides continuous monitoring of vital chassis resources. The built-in, normally open/closed, dry contact relay will engage on the following fault conditions:

- Power supply failure
- High internal temperature
- Fan speed failure
- Backplane voltage error

Specifications				
Lifetime limited warranty	**Reach, RoHS and WEEE Compliant**	**HTSUS Number:** 8517.62.0020	**UNSPSC Code:** 43201602	**ECCN:** 5A991

Features	
Intelligent Alarm Relay	• Dry Contact Relay engaged upon monitored chassis error conditions: power failure, high temperature, backplane voltage error, fan speed failure • 3 amps @24 vDC, Normally open / normally closed contacts on removable terminal blocks
Hot-swappable Modules	All modules, management module and power supplies are hot-swappable

Power				
Nominal input voltage	**MCR1900-AC** 115/230 VAC	**MCR1900-DAC** 115/230 VAC	**MCR1900-DC** 24/48v DC	**MCR1900-DDC** 24/48v DC
Input Voltage Range	**MCR1900-AC** 90 - 264 VAC	**MCR1900-DAC** 90 - 264 VAC	**MCR1900-DC** 18 - 72v DC	**MCR1900-DDC** 18 - 72v DC
Capacity	**MCR1900-AC** 120 watts max.	**MCR1900-DAC** 240 watts max. The dual supply provides redundancy for instant fail-over. Power supplies load share	**MCR1900-DC** 120 watts max.	**MCR1900-DDC** 240 watts max. The dual supply provides redundancy for instant fail-over. Power supplies load share

AC input frequency	**MCR1900-AC** 47 - 63 Hz	**MCR1900-DAC** 47 - 63 Hz	**MCR1900-DC** N/A	**MCR1900-DDC** N/A
International Power Line Cords by Model	**MCR1900-AC** • USA: IEC320-C13 to NEMA5-15P • UK: IEC320-C13 to BS1363 • EU: IEC320-C13 to CEE717 Schuko • South Africa / India: IEC320-C13 to BS546 • Australia: IEC320-C13 to AS3112	**MCR1900-DAC** • USA: IEC320-C13 to NEMA5-15P • UK: IEC320-C13 to BS1363 • EU: IEC320-C13 to CEE717 Schuko • South Africa / India: IEC320-C13 to BS546 • Australia: IEC320-C13 to AS3112	**MCR1900-DC** N/A	**MCR1900-DDC** N/A
LEDs	**MCR1900-AC** Power Supply A Status	**MCR1900-DAC** Power Supply A and B status	**MCR1900-DC** Power Supply A Status	**MCR1900-DDC** Power Supply A and B status
Grounding	Dual ground screws for #10 ring terminals or grounding lug connectors provide a reliable chassis ground connection.			
Environmental Specifications				
Heat Output (BTU/HR)	**MCR1900-AC** 17	**MCR1900-DAC** 29	**MCR1900-DC** 19 at 24vdc, 25 at 48vdc	**MCR1900-DDC** 34 at 24vdc, 49 at 48vdc

MTBF (Hours)*	**MCR1900-AC** 31,716 Hours	**MCR1900-DAC** 255,530 Hours	**MCR1900-DC** 32,051 Hours	**MCR1900-DDC** 255,531 Hours
Operating Temperature	0°C to 50°C (32°F to 122°F)			
Storage Temperature	-25°C to 70°C (-13°F to 158°F)			
Humidity	5 to 95% (non-condensing) for both storage and operation.			
Case	SECC Zinc plated sheet metal (1 mm)			
Ingress Protection Rating	IP30 with all slots occupied			
Altitude	up to 3,038 meters (10,000 ft)			
Mounting	2U - 19' rack mounting hardware is included 2U - 23' Telcom / ETSI rack mounting hardware is optional			
Product Weight and Dimensions				
Weight	**MCR1900-AC** 6.32 kg, 14 lbs	**MCR1900-DAC** 7.0 kg, 15.4 lbs	**MCR1900-DC** 6.39 Kg, 14.1 lbs	**MCR1900-DDC** 7.14 kg, 15.74 lbs
Dimensions	356 x 435 x 89 mm, 14 x 17.2 x 3.5 in			
Packaging				
Shipping Weight	**MCR1900-AC** 7.76 kg, 17 lbs	**MCR1900-DAC** 9.0 kg, 19.8 lbs	**MCR1900-DC** 7.76 kg, 17.11 lbs	**MCR1900-DDC** 9.0 kg, 19.8 lbs
Shipping Dimensions	559 x 482 x 178 mm, 22 x 19 x 7 in			

Regulatory Approvals	
Emissions	• FCC Part 15 Class A, EN55022 Class A • CISPR 32:2015/EN 55032:2015 (Class A) • CISPR 35/EN 55035 • CFR47:2003, Chapter 1, Part 15 Subpart B,(USA) Class A • ICES-003, Issue 4, February 2004 (Canada) • EN55022:1998 + A1:2000 + A2:2003 Class A • EN61000-3-2 : 1995, Limits for Harmonic Current Emissions • EN61000-3-3 : 1995, Limits of Voltage Fluctuations and Flicker
Immunity	• EN55024:1998 + A1:2001 + A2:2003 • EN61000-4-2: Electrostatic Discharge • EN61000-4-3: RF Electromagnetic Field Modulated • EN61000-4-4: Fast Transients • EN61000-4-5: Surge • EN61000-4-6: RF Continuous Conducted • EN61000-4-8: Power-Frequency Magnetic Field • EN61000-4-11: Voltage Dips and Voltage Interruptions
Safety	• UL/EN/IEC 62368-1 • CAN/CSA C22.2 No. 62368-1 • UL 60950-1 • IEC 60950-1(ed 2); am1, am2 • EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013 • CAN/CSA-C22.2 No. 60950-1-03 and ANSI/UL 60950-1, First Edition April 1st 2003 (Recognized Component) • CE

**Calculation model based on MIL-HDBK-217-FN2 @ 30°C*

Product List

MCR1900-AC - 19 Slot Chassis for Media Converter and Ethernet Extender Modules. Single AC power expandable to dual AC power. 15 empty slot cover plates included

Power Cord & Part Number(s)

USA	UK	EU	SA	AUS	None
05059944	05059941	05059942	05059945	05059946	05059948

MCR1900-DAC - 19 Slot Chassis for Media Converter and Ethernet Extender Modules. Dual AC power. 15 empty slot cover plates included

Power Cord & Part Number(s)

USA	UK	EU	SA	AUS	None
05059954	05059951	05059952	05059955	05059956	05059958

MCR1900-DC - 19 Slot Chassis for Media Converter and Ethernet Extender Modules. Single 48vDC power expandable to dual DC power. 15 slot plates included

Power Cord & Part Number(s)

None
05059920

MCR1900-DDC - 19 Slot Chassis for Media Converter and Ethernet Extender Modules. Dual 48vDC power. 15 slot plates included

Power Cord & Part Number(s)

None
05059930

MCR-MGT - Management Module for the MCR chassis. 10/100/1000 ethernet RJ45, serial console port RJ45, SNMP read/write, Telnet/SSH and Internet Browser access and advanced security

Part Number(s)
05051900

Related Accessories

Cable Accessories

3 meter RJ45 to RJ45 CAT5 Straight-thru cable #1100360-10

04005120

DBA0020C - RJ-45F to DB-9F crossover (DTE) adapter #1100300-10 for Perle serial console ports with Sun/Cisco pinout.

04007040

Accessories

MCR-ACPWR - AC Power Supply for MCR1900 Media Converter Chassis

05059811

MCR-ACPWR - AC Power Supply for MCR1900 Media Converter Chassis

05059812

MCR-ACPWR - AC Power Supply for MCR1900 Media Converter Chassis

05059814

MCR-ACPWR - AC Power Supply for MCR1900 Media Converter Chassis

05059815

MCR-ACPWR - AC Power Supply for MCR1900 Media Converter Chassis

05059816

MCR-ACPWR - AC Power Supply for MCR1900 Media Converter Chassis

05059818

MCR-DCPWR - Redundant 48vDC power supply for MCR1900

05059820

MCR-FPL - Face Plate for Empty Slots on MCR1900 Media Converter Chassis

05059830

MCR-RMK23 - One Set of Rack Mount Brackets for 23 inch Racks

05059840