

ARRIS CHP-CHASSIS-19U

CHASSIS AND POWER SUPPLY



ARRIS products and solutions can help cable operators attain new subscriber revenue and higher average revenue per subscriber without major CAPEX. Cable operators can seamlessly and easily stay in line with future goals, add new services, and strongly position against the competition. As part of the CHP Max Headend Optics Platform, CHP Max5000® headend chassis applications unite HFC and digital transport onto a single scalable system, allowing service providers to accelerate deployment of VOD, high speed data, telephony, and other advanced services in a space-saving footprint.

- Optimize headend and hub efficiencies with industry leading density and low power consumption up to 20 transmitters or 40 receivers per 2RU chassis
- Up to 44 full spectrum wavelengths for harvesting new bandwidth through node segmentation
- Support multiple optical architectures including full spectrum, overlay, and RFoG
- Integrated optical passives for further reduction of footprint
- DOCSIS® 3.1 support for future capacity expansion to 1.2 GHz downstream, 300 MHz upstream
- Transmitters with variable output reduce need for troublesome optical attenuators and front or rear fiber connection simplify installation and cable management
- Configure, monitor, and manage with CORView™ Element Management System

SPECIFICATIONS

CHASSIS

Interfaces

SNMP Interface ¹	Connector: RJ-45; Electrical Interface: 10BaseT Ethernet
Hi Speed Shelf Interconnect Interface	Connector: RJ-45; Electrical Interface: 100BaseT Ethernet ²
Lo Speed Shelf Interconnect Interface	Connector: RJ-14; Electrical Interface: RS-485
Local Alarm Terminal Interface	Connector: Terminal block; Electrical Interface: NO, NC, or C3

Mechanical

Chassis Dimensions (W x H x D)	19 x 3.5 x 18 in (48.3 x 8.9 x 45.7 cm)
Module Port Dimension, 1 wide	1.25 in (3.2 cm)
Weight, empty ⁴	15.5 lbs (7.0 kg)
Environmental	
Operational Temperature Range	32° to 122°F (0° to 50°C)
Storage Temperature Range	-40° to 158°F (-40° to 70°C)
Humidity, max	85% non-condensing

NOTES:

1. Requires use of system management module (SMM).
2. High speed shelf interconnection only; requires backplane Ethernet Switch (P/N CHP-BP-ETH-SW).
3. Dry contact closures. NO = Normally Open. NC = Normally Closed. C = Common.
4. Chassis enclosure and backplane without modules.

CHP-PS/AC1-SW AC POWER SUPPLY

Powering	CHP-PS/AC1-SW
Input Voltage, 47 to 63 Hz	85 to 264 Vac
Input Current Limit, continuous, RMS, max	9.0 A
Inrush Current Limit, peak, max	40 A
Input Transient, IEEE C62.41-1991 Category B 1.2, 50 μ s	4 kV/0.13 kA
Power Consumption, max	700 W
Input Connector	IEC 320-C14 plug
Output Voltages and Current	12.0 Vdc +0.35/-0.0 Vdc, 2.3 to 24 A 5.0 Vdc +0.2/-0.05 Vdc, 31 A -5.0 Vdc +0.15/-0.2 Vdc, 2 A 3.5 Vdc \pm 0.1 Vdc, 5 A
Output Noise Ripple, RMS	25 mV @ 12.0 V output 25 mV @ 5.0 V output 20 mV @ -5.0 V output 20 mV @ 3.5 V output
Efficiency, min	68%
Power Factor	0.9
Status Interface	
Functions Monitored	All DC voltages, internal temperature, fan currents
Mechanical	
External Dimensions (W x H x D) in (cm)	3.9 x 1.57 x 14.46 in (9.91 x 3.99 x 36.73 cm)
Weight	2.75 lbs (1.24 kg)
Environmental	
Operational Temperature Range	32° to 122°F (0° to 50°C)
Storage Temperature Range	-40° to 158°F (-40° to 70°C)
Humidity	5% to 95% non-condensing

CHP-PS/DC1-SW DC POWER SUPPLY

Powering	CHP-PS/DC1-SW
Input Voltage	-72 to -36 Vdc
Input Current Limit, max	15.0 A @ 36 Vdc
Inrush Current Limit, max	40 A ¹
Power Consumption, max	540 W
Input Connector	3-pin male connector, mates with power plug (P/N MT0401)
Output Voltages and Current	12.0 Vdc +0.35/-0.0 Vdc, 24 A 5.0 Vdc +0.2/-0.05 Vdc, 31 A -5.0 Vdc +0.15/-0.2 Vdc, 2 A 3.5 Vdc \pm 0.1 Vdc, 5 A
Output Noise Ripple, RMS	25 mV @ 12.0 V output 25 mV @ 5.0 V output 20 mV @ -5.0 V output 20 mV @ 3.5 V output
Output Noise Switching Spikes, peak to peak	6100 mV @ 12.0 V output 100 mV @ 5.0 V output 60 mV @ -5.0 V output 60 mV @ 3.5 V output
Efficiency, min ²	85%
Status Interface	
Functions Monitored	Input and all DC voltages, internal temperature, fan currents
Mechanical	
External Dimensions (W x H x D) in (cm)	3.9 x 1.57 x 14.46 in (9.91 x 3.99 x 36.73 cm)
Weight	2.75 lbs (1.24 kg)
Environmental	
Operational Temperature Range	32° to 122°F (0° to 50°C)
Storage Temperature Range	-40° to 158°F (-40° to 70°C)
Humidity, non-condensing	10% to 95%, not to exceed 0.024 lbs of water/lb of dry air

Regulatory Requirements³

UL60950 3rd Ed/CSA C22.2 number 60950 and EN60950
EN50083-2
EN300 386 V1.3.1
FCC Part 15, Class A
FCC Part 76, Subpart K
EN55022, Class A

NOTES:

- Inrush current shall not trip a 20 A mains external circuit breaker during a Hot Start condition. Hot Start occurs when a thermally stabilized power supply is removed and immediately reinserted.
- When operating at 25°C over the input operating range with a full rated output load.
- All emissions tests must be passed in two configurations: two power supplies operating redundantly and a single power supply installed in a chassis configured to provide maximum system load.

ORDERING INFORMATION

MODEL NAME	COMPONENT TYPE	DESCRIPTION
CHP-CHASSIS-19U	Chassis	19-inch CHP Max5000 chassis with enhanced backplane and slots for 10 application modules and 2 power supplies
CHP-CHASSIS-R-19U		19-inch CHP Max5000 recessed chassis for use with front fiber applications, includes enhanced backplane and slots for 10 application modules and 2 power supplies
CHP-EXTBKT-23	23-in External Bracket	Bracket adapts 19-inch chassis to install in a 23-inch rack
CHP-PS/AC1-SW	Power Supply	Isolated 475 Watt power supply accepting 110/220 Vac input
CHP-PS/DC1-SW		Isolated 475 Watt power supply accepting -48 Vdc input