

E6000r™ Remote PHY Shelf

2RU shelf holding up to three Remote PHY Devices (RPDs)



FEATURES

- Hosts up to 3 x E6000n Shelf RPD modules, managed via the CCAP Core
- 9 x F connectors providing a total of 3 Downstream service groups (DS-SG) up to 1.2GHz and 6 Upstream service groups (US-SG) up to 204MHz
- Full spectrum DOCSIS® 3.0/3.1
- Extended temperature and humidity specification suitable for non-environmentally-controlled outdoor cabinets

PRODUCT OVERVIEW

Remote PHY is a key component in ARRIS's Distributed Access Architecture (DAA) portfolio, which can provide significant operational benefits—including increased bandwidth capacity, improved fiber efficiencies (wavelengths and distance), simplified plant operations with digital optics, and decreased loads on facility space and power systems.

The ARRIS Remote PHY Shelf enables MSOs to deploy digital fiber closer to end subscribers while making the change easier for existing HFC networks, alleviating the need to modify fiber nodes as it works with nodes from any vendor.

An E6000r Remote PHY Shelf is a 19" rack mount unit which can host up to three E6000n Remote PHY Devices (RPDs). RPDs work in conjunction with the CCAP Core to extend the PHY layer from the CCAP further into the network, closer to the customer. MAC processing, provisioning, and monitoring functions remain in the headend. The RPD provides full spectrum support for digital broadcast TV, VoD, and DOCSIS 3.0 and DOCSIS 3.1, as well as strategic alignment with future NFV/SDN/FTTx systems.

E6000r R-PHY Shelf Use Cases

- Outdoor street cabinets, in non-environmentally-controlled conditions
- Smaller hub sites, especially where power is a challenge
- Replacement of legacy CMTS infrastructure, overcoming channel limitations and adding DOCSIS® 3.1 capability
- In buildings, such as Multi-Dwelling Units (MDUs) and offices, particularly newer ones that have fiber connectivity



GENERAL SPECIFICATIONS

Connectivity

Front connections for RF, SFP+, Power

RF Connectors: F-type

3 RPD Configuration

3 Downstream Service Groups

6 Upstream Service Groups

2 RPD Configuration

2 Downstream Service Groups

4 Upstream Service Groups

1 RPD Configuration

1 Downstream Service Group

2 Upstream Service Groups

Service Group Configurations

1x1 and 1x2 (Downstream x Upstream)

Downstream Service Group Capacity (DS-SG)

Up to 5 OFDM DS @ 192 MHz

Up to 128 Annex B or 96 Annex A SC-QAM

CCAP DRFI specification compliant power levels

Upstream Service Group Capacity (US-SG)

Up to 12x SC-QAM

Up to 2x 96MHz OFDMA

GENERAL SPECIFICATIONS (CONTINUED)

Video Support

Broadcast, VOD and SDV

CIN Connectivity

1 x 10G SFP+ per RPD (2 x 10G SFP+ via future software upgrade)

Path Redundancy (via future software upgrade)

Daisy Chaining (via future software upgrade)

Fans

N+1 hot swappable fans

Physical

Width 19 in (48.3 cm)

Height 2RU (3.5 in, 8.9 cm)

Depth 10.4 in (26.5 cm)

Weight (without RPDs) 23.1 lbs (10.5 kg)

Power

Dual redundant and load sharing AC (110V/220V) or DC (-48V)

Power Consumption at 25°C
(maximum)
3 RPD – 200W
2 RPD – 140W
1 RPD – 90W

Power Consumption at 65°C
(maximum)
3 RPD – 240W
2 RPD – 180W
1 RPD – 120W

Environmental

Operating Temperature -20 °C to 65 °C (-4 °F to 149 °F)

Operating Humidity 5% to 95% non-condensing

CUSTOMER CARE

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