Optical Node Series (NC)

NH4000, NH4600-UVPx
Universal VHub (UVHub) Platform

FEATURES

- 12 module slots, each with RF connectivity, enable increased flexibility suited for a variety of applications
- Increased RFoG capacity and capabilities
- RF Return passband filtering and combining supported by passive pluggable modules for simplified network upgrades and evolutions
- Enables OBI-free RF Return options
- 150 Watt high-efficiency power supplies support redundancy and system reliability
- Six fiber in/out ports enable large fiber distributions and expansions
- Remote and local monitoring and management using Opti-Trace®
- Same form-factor and physical dimensions of the popular NC4000/NH4000 Virtual Hub (VHub) platform
- Supports 10G EPON Remote OLT (R-OLT) applications
- NH4600-UVPx extended heat fins supports three (3x) XE4202M R-OLT instantiations
- Strand or pedestal mounting

PRODUCT OVERVIEW

Following the widely deployed ARRIS NC4000 Node platform, this second-generation Virtual Hub supports new features that enhance and increase flexibility in RFoG, RF + PON, Broadcast/Narrowcast, Fiber-deep, and PON-only designs for commercial and residential services, while retaining the same external physical dimensions, form-factor, and electrical/mechanical specifications as its predecessor.

Interior components of the UVHub (motherboard, power chassis board, and power supply) have been redesigned to provide greater flexibility for cable operator installations. Specifically, the UVHub enables RF connectivity in all twelve module slot positions for higher RF return density and segmentation options. A high-efficiency 150 watt power supply is included and a second power supply is available in the -UVP2 version for redundancy and increased reliability. The NH4000 Universal Virtual Hub is packaged in a weatherproof aluminum housing that protects the individual modules and efficiently dissipates internally generated heat.

ARRIS Universal VHubs offer the following additional features and benefits:

- Supports OBI-free RF Return technology
- Accommodates multiple combinations of ARRIS VHub/UVHub plug-in modules to support various architectures
- Up to 12 plug-in active and/or passive modules: six in the Base and six in the Lid, providing high-density functionality
- Lid and Base motherboards accommodate plug-in modules for RF return filtering band-splits, RF return aliasing, and segment combining, allowing for multiple RF Return segmentation options
- Improved fiber tray provides more efficient fiber management and handling
- Supports all first generation VHub plug-in modules
- Six fiber entry ports support large distributions and two AC power entry ports support independent redundant power
- NH4600-UVPx version features 1.6 inch higher Lid heat fins, providing ample thermal margin three (3x) instantiations of the XE4202M R-OLT or other dense installations
- Local and remote monitoring and management using ARRIS Opti-Trace software

The UVHub can transform a fully operational indoor Hub to a standard weatherproof outdoor node enclosure that is closer to subscriber locations in order to more efficiently deliver services. Simultaneously, it reduces capital and operating expenses as well as minimizes installation time and time to revenue realization.

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	20” L x 9.5” W x 10.75” H (50.8 cm x 24.1 cm x 27.3 cm) NH4000-UVPx
	20” L x 9.5” W x 12.35” H (50.8 cm x 24.1 cm x 31.37 cm) NH4600-UVPx
Weight	38 lbs. (17.1 kg) not including pluggable modules
Housing Ports	2 AC Only Ports, and 6 fiber ports
Environmental	
Operating Temperature Range	–40° to +60°C (–40° to +140°F)
Storage Temperature Range	–40° to +85°C (–40° to +185°F)
Humidity	5% to 95% non-condensing
Power Supply (PS4102)	
Operating Input voltage range	44 to 95 V_{RMS} (50–60 Hz Quasi-Square Wave) 6.0 A max
Output currents (PS4102)	
24 V	5.0 A max, with 5 V load; 6.0 A max, without 5 V load
5 V	5.0 A max
DC power consumption	Dependent on the specific configuration and number of installed modules
Surge	6 Kv minimum, per SCTE
Protection	Over-voltage, over temperature, short circuit with auto-reset

NOTE:
Please refer to individual product data sheets regarding specific products mentioned in this document.

ORDERING INFORMATION

Model Name	Description
NH4000-UVP1	NH4000 Housing with one PS4102 150 Watt Power Supply, PC4010 Base Power Chassis, LM4010 Lid Motherboard, Fiber Management Tray
NH4000-UVP2	NH4000 Housing with two PS4102 150 Watt Power Supplies, PC4010 Base Power Chassis, LM4010 Lid Motherboard, Fiber Management Tray
NH4600-UVP2	NH4600 Housing with two PS4102 150 Watt Power Supplies, PC4010 Base Power Chassis, LM4010 Lid Motherboard, and Fiber Management Tray **NOTE**: The NH4600-UVP2 is required for supporting three (3x) instantiations of the XE4202M Remote OLT (R-OLT) in the same UVHub platform.

RELATED PRODUCTS

VT/DT4250 Digital Return Transceivers	OR41x8, OR4216R Optical Diplexer/Receivers
EDFA Fiber Amplifiers	XE4202M Remote OLT (R-OLT)
Opti-Trace® Software	CP8xxx OBI-free RFoG ONUs

Customer Care

Contact Customer Care for product information and sales:

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Note: Specifications are subject to change without notice.

1511221-RevD_NH4000-Universal VHub_20190514 05/2019 EA-29907