COMMSCOPE®

## FEATURES

- Compact cabinet-style node
- Single active output; internally splitable to 2 physical ports
- 1218 MHz downstream
- High level output 114 dBµV per 8 MHz @ 1218 MHz
- 1x2 Segmentable
- Houses the CommScope E6000n RPD DAA module or RD2312 RMD
- Band splits of 42/54 MHz, 65/85 MHz, 85/102 MHz, and 204/258 MHz field upgradable via pluggable diplex filters
- Electronic control and monitoring via the installed DAA module
- Integrated Fiber Management Tray
- RF Overlay supported with RD2312 RMD module (not supported in E6000n RPD)
- Field replaceable Power Supply (Line and Mains)
- Housing 1.8 GHz capable

The CommScope DC2180 is a cabinet style, compact node deployable in in a street cabinet or MDU environment. This flexible compact node has been designed specifically for deploying DOCSIS® 3.1 Remote PHY and Remote MACPHY Distributed Access Architecture (DAA) networks.

For DAA D3.1 deployments, the DC2180 node supports an E6000n 1x2 Remote PHY Device (RPD) or RD2312 Remote MACPHY Device (RMD) module with launch power up to 114 dBµV at 1218 MHz when using single RF port or up to 110 dBµV when using two RF ports. The DC2180 provides Operators the flexibility to support their network evolution needs with field upgradable diplex filters to allow customers to upgrade to 204 MHz high split when ready as well as the ability to remotely configure downstream gain and tilt.

To support future applications, the DC2180 Node housing is designed to support up to 1.8 GHz maximum downstream frequency as specified in DOCSIS 4.0 as well as provide for deployment of CommScope's EPON and XGS PON modules. Additionally, the Node and RF Module support a third RF port to enable additional product evolution.
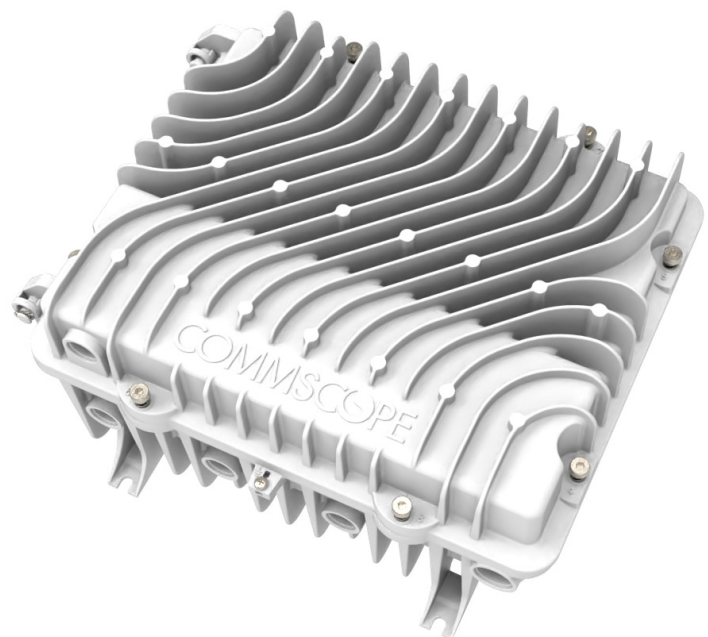
SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions[1]	30 cm x 35 cm x 18 cm
Weight	12 kg max
Housing Ports	3 RF, 1 Optical Entry, 1 Mains AC power
RF Connectors	PG11
Optical Entry	PG16
Protection Class	IP67[2]
Environmental	
Operating Temperature Range	-40° to +60°C external air ambient
Relative Humidity	5% to 95% non-condensing
Powering	
Line (Remote) Power Supply Range	28 VAC to 90 VAC
Mains Power Supply Range	90 VAC to 264 VAC, 50/60 Hz
Power Supply Holdup Time	20 ms (min)
Line Power Passing	10 A per port
Power Consumption (max)	100 WAC max
Forward Path	
Bandwidth	54 MHz to 1218 MHz
Output Power Level (max)[3]	114 dBμV per 8 MHz @ 1218 MHz
Output Power Level Control	91 dBμV to 114 dBμV per 8 MHz @ 1218 MHz
Tilt Control	5 dB to 19 dB (between 85 MHz and 1218 MHz)
Flatness	± 1 dB
Return Loss	≥ 16 dB
MER (at max level)	45 dB
BER (Pre-FEC at max level)	< 1×10^{-6}
Test Point	-20 dB per port, F-Female
Support for RF Overlay	Yes, via RD2312 RMD module
Return Path	
Bandwidth	5 MHz to 204 MHz
Supported Band Splits	42/54 MHz, 65/85 MHz, 85/102 MHz, 204/258 MHz
Input Level	65 dBμV to 80 dBμV per 6.4 MHz
Test Point	-20 dB per port, F-Female

NOTES:
1. Including fins, hinges, mounting hardware, and port entry mechanisms.
2. For network power. IP54 with Mains power.
3. Channel Plan all digital 85 MHz to 1218 MHz, 16 dB tilt (85–1218 MHz). Output to P1 only.

ORDERING INFORMATION

Model Name	Description
DC2180-ALA1A22R1A0	DC2180 Node with Line Power Supply, D3.1 RF Module, 2 RF Ports, 5–65/85–1218 MHZ US/DS Diplexers and S-RPD (PN 1000993) DAA Module
DC2180-ALA1A24R1A0	DC2180 Node with Line Power Supply, D3.1 RF Module, 2 RF Ports, 5–204/258–1218 US/DS Diplexers and S-RPD (PN 1000993) DAA Module
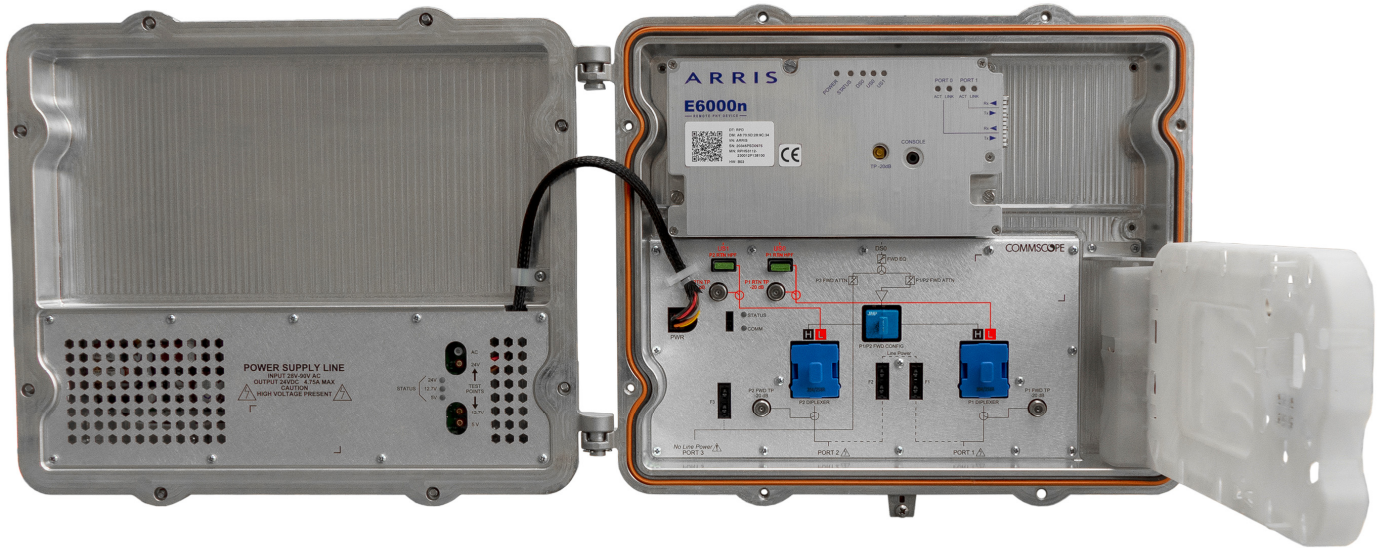
RELATED PRODUCTS

E6000n Remote PHY	RD2322 Remote MACPHY
E6000R R-PHY Shelf	E6000R-HD R-PHY Shelf
E6000® CCAP Core	10G SFP+ Options

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656

COMMSCOPE®

1514728_DC2180 CompactDAA_DS_RevB