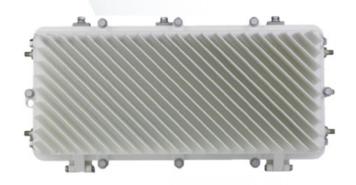




SC-2D4 ACCESS NODE

The Entra® SC-2D4 Access Node is a key component of the Entra unified cable access solution, a Distributed Access Architecture (DAA) that delivers significant performance gains, substantial savings on capital and operating expenses (CAPEX/OPEX), and enables an easy migration to an all-IP, all-fiber network







Turn-key R-MACPHY Solution

A complete R-MACPHY solution that enables DAA deployments including nodes, Entra Access Controller and DAA video solutions.



Full Spectrum DOCSIS 3.1

Delivers maximum DOCSIS 3.1 throughput with full spectrum support up to 1.2GHz downstream and 204 MHz upstream



R-MACPHY Advantages

Moving the MAC to the network edge minimizes headend power and space requirements as well as network latency and jitter.



Resilient Design

Environmentally hardened 4-port node form factor. Field-replaceable components include amplifier modules, power supplies, Optical Receiver and main processor module.



Future-Proof Design

Designed to evolve as technologies evolve with support for 1.8 GHz and a modular architecture.



Optical Receiver

Analog RF Video Overlay

ENTRA®



SC-2D4 ACCESS NODE

Specifications

General	
SFP+ Ports	2 ports of 10 GE
SFP+ Optical Module Support	ER, LR, ZR, bidirectional, CWDM, DWDM
Service Groups	Up to 2 downstream x 2 upstream
Downstream Channels	Up to 158 QAM J.83 annex A/B/C; up to 6 OFDM per service group
Channel Bandwidths	Up to 192 MHz OFDM
Out of Band Capabilities	Up to 4 channels of OOB, SCTE 55-1, SCTE 55-2, SCTE 25-1 HMS Up to 160 CW pilot tones Up to 2 leakage detection tags per service group Viavi Path Trak support
Wideband Digital Forward	Up to 43-6 MHz/32-8 MHz channels of broadcast band transport over IP per Service Group. Typical broadcast modulations 8VSB, PAL, FM, NTSC
Upstream Channels	Up to 12 QAM, up to 2 OFDMA per service group
Physical	
Height, Width, Depth	10.4" (265 mm), 20.8" (529 mm), 11.02" (280 mm)
Weight	43 lb (19.5 kg)
Mounting Options	Aerial, pedestal, wall, pole, rack mount with accessory bracket Horizontal or vertical mounting
Environment	
Temperature (operating)	-40 to 60 °C (-40 to 140 °F)
Temperature (storage)	-40 to 70 °C (-40 to 158 °F)
Relative Humidity (operating / storage)	5 to 95% noncondensing
Altitude (operating /	-196 to 13,123 feet
storage)	(-60 to 4,000 meters)
Power	50 V 100 V
Input Frequency	50 Hz/60 Hz
Input Voltage	38 V to 90 VAC coax line (quasi square wave)
Power Consumption	123 W nominal with 2 coax ports active 148 W nominal with 4 coax ports active 157 W maximum

RF Specifications		
	Up to 4 RF Ports, 75 Ω	
RF Ports	Operational bandwidth: 5 MHz to 1,218 MHz	
	5 - 42 MHz/54 – 1218 MHz	
Diplexer Options	5 – 65 MHz / 85 – 1218 MHz	
	5 – 85 MHz/102 – 1218 MHz	
	5-204 MHz/258 – 1218 MHz	
Output Composite Power	Up to 71 dBmV	
RF Output Level	61 dBmV @ (virtual)	
Pluggable Tilt	Up to 24 dB (s/w readable ID)	
Upstream Nominal	+7 to +27 dBmV/6.4 MHz	
Setpoint, DOCSIS		
	Test ports: -20dB	
	Low RF level alarm per port	
Diagnostics	RF amplifier on/off controls per port	
	RF input on/off controls per port	
	Voltage and temperature monitoring	
Optical Receiver		
	1260 – 1560nm	
Optical Input	2 to -6 dBm ACG dynamic range	
	SC-APC	
RF Output	50 to 800 MHz	
Regulatory, Industry, and Standards Compliance		
ACMA Supplier Number	E304 (CAN/ARBN 84156023504), C-Tick mark	
EMC	EN 55032, EN 55024,EN 61000-3-2, EN 61000-	
	3-3, FCC PART 15 SUBPART B, ICES-003,	
(Immunity/Emissions)	(AS/NZS/VCCI) CISPR 32	
Safety	ANSI/UL 60950-1, IEC/EN 62368-1	
Jaicty	CAN/CSA C22.2 No. 60950-1-07	
	IEC 60950-22, CSA C22.2 No. 94.1,	
Outdoor Use, IP Rating	CSA C22.2 No. 94.2, ANSI/UL 60950-22,	
	ANSI/UL 50, 50E, IEC 60529, IP68	
Hazardous Substance	IEC/EN 63000	
	RoHS Directive 2011/65/EC,	
	amended by 2015/863/EU	
WEEE Directive	2012/95/EC	
REACH	Regulation (EC) No 1907/2006	
Corrosion Resistance	GR-2873-CORE, ASTM B117	

Ordering Information	
SC-2D-3000-FL	SC-2D3 Access Node. Includes DOCSIS 3.1 RMD with support for 2 SGs DS, 2 SGs US, 2 SFP+ 10 Gbps Ports (Optics Not
	Included), Up to 4 Coax Ports, Up to 2 Amplifier Modules (not included), and Redundant Power Supplies.
SC-2D-3000-HS-KIT-FL	SC-2D3 Access Node. Includes DOCSIS 3.1 RMD with support for 2 SGs DS, 2 SGs US, 2 SFP+ 10 Gbps Ports (Optics Not
	Included), Up to 4 Coax Ports, and Redundant Power Supplies. Includes Qty. 2 RF-SC-2D-3D-HS RF Amplifier Modules,
	US 5-204 MHz. DS 258-1218 MHz. 17 dB Tilt.

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