

Optical Node Series (NC)

OE4130S-01 Monitoring and Control Module

FEATURES

- Remote status monitoring and management
- Highly flexible, easily configurable support for transmission at 1310 nm, 1550 nm, 1 of 15 CWDM wavelengths, or 1 of 40 DWDM wavelengths
- Hot plug in/out



PRODUCT OVERVIEW

The OE4130S-01 Monitoring and Control Module permits monitoring and management of the VH4000 Virtual Hub from ARRIS's Opti-Trace EMS software.

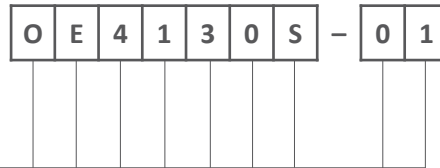
The OE4130S-01 communicates with other plug-in modules that may be installed in the VHub via an I2C (inter-integrated circuit) bus, and its output is directed to a DR3000 series Digital Receiver installed in a chassis at the Headend (or to the next upstream node in a daisy-chained series of optical nodes). This output contains status and alarm information from the modules within the VHub. Input of management signals to the OE4130S-01 comes from an NI3030 Network Interface Module installed in a chassis at the Headend (or from the previous node in a daisy-chained configuration of nodes). (While the output of the OE4130S-01 is always required for monitoring the VHub at the Headend, an input signal to the OE4130S-01 is only required if management of the VHub and its modules is needed in addition to monitoring.)

The module's optical transmit/receive ports are implemented with optional plug-in transceivers for ultimate flexibility and affordability. Conforming to the Small Form Factor Pluggable (SFP) Multisource Agreement, these state-of-the-art transceivers are available in a variety of transmit/receive wavelengths, including dedicated 1310 nm (for 10 and 40 km links), 1550 nm (for links up to 40 km), CWDM ITU grid (for links up to 40 km), or DWDM ITU grid (for links up to 120 km), all operating at data rates of 2.125 Gbps. Longer spans are supported by using ARRIS's DX4515 Digital Transponder.

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	4.0" D x 1.8" H x 2.3" W (10.2 cm x 4.6 cm x 5.8 cm)
Weight	0.7 lbs (0.32 kg)
Environmental	
Operating Temperature Range	-40° to +85°C (-40° to 185°F)
Storage Temperature Range	-40° to +85°C (-40° to 185°F)
Humidity	5% to 95% non-condensing
Power Requirements	
Powering	24 V _{DC} (175 mA)
Power consumption	4.2 W
General	
Hot plug-in/out	
Optical interface connectors	LC Duplex on SFP
Optical transmission bit rate	2.125 Gb/s
Optical	
	<i>The optical port facilities of the OE4130S-01 can be populated with a variety of SFP (plug-in) transceivers depending on the network application. Please refer to the appropriate data sheets for the selected transceivers for detailed specifications. Following is a summary of available transceiver options (model numbers and brief descriptions) for these ports.</i>
2.125 Gbps SFP Transceiver Options	<ul style="list-style-type: none"> • TR4000-PI (transmit at 1310 nm for links up to 10 km) • TR4040-PI (transmit at 1310 nm for links up to 40 km) • TR4540-0000-PI (transmit at 1550 nm for links up to 40 km) • TR4440B-xxxx-PI (transmit at CWDM wavelength of xxxx = 1270, 1290, . . . , 1350 or 1430, 1450, 1470, . . . , 1610 nm for links up to 40 km) • TR4580-xx-PI (transmit at 1 of 40 DWDM wavelengths for links up to 120 km) (<i>Note: Longer distances can be achieved with the use of an ARRIS Dispersion Compensation Module and/or DWDM transponders in the return path. EDFAs can also be used to extend the link budget.</i>)
LED Indicators	
For SFP optical ports	<ul style="list-style-type: none"> • TX: Green ON = OK; OFF = bad SFP or unit not powered • RX: Green ON = signal good; OFF = LOS asserted; Blinking = high BER (excessive bit error rate)
For Ethernet port (100M and LINK indicators)	<i>not currently used</i>

ORDERING INFORMATION



Transceiver Plug-in Modules

SFP modules must be ordered separately. Please refer to the above list of available transceivers and appropriate data sheets for specific complete model numbers and ordering information.

Node Monitoring and Control Module

RELATED PRODUCTS

VH4000 VHub	Optical Patch Cords
SFPs	Optical Passives
NI3030 Network Interface Module	DR3000 Receiver

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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