

NE20E-S Series WDM Line Card



Product Overview

Coarse Wavelength Division Multiplexer (CWDM) is a low-cost WDM transmission technology. As shown in Figure 1, CWDM uses an optical multiplexer to multiplex optical signals with different wavelengths (λ_1 to λ_n) into a channel of white optical signals, which are transmitted along a single optical fiber. At the receive end, CWDM uses an optical demultiplexer to demultiplex the hybrid optical signals into optical signals with different wavelengths (λ_1 to λ_n).

Figure 1. Optical Multiplexer and Demultiplexer



The Huawei® NE20E-S series universal service routers support CWDM line card (错误！未找到引用源。) and integrate the multiplexer and demultiplexer to provide a solution that features low costs, fast deployment, and flexible applications.

Figure 2. 8-Channel CWDM Multiplexing & Demultiplexing (1471/1491/1511/1531/1551/1571/1591/1611nm)
Physical Interface Card(PIC)



Product Features

Dense Wavelength Division Multiplexer (DWDM) is definitely the first choice in the optical fiber application field, but it costs a lot. CWDM costs less because it has a wider interval (20 nm as a universal standard in the industry) between multiplexing wavelengths than that of DWDM (0.2 nm to 1.2 nm).

A wider interval between multiplexing wavelengths has lower requirements on the laser's technical specification and simplifies the optical multiplexer and demultiplexer architecture, which greatly reduces costs.

Currently, network construction is facing optical fiber resource insufficiency or high optical fiber leasing costs. Using the CWDM line card on the NE20E-S Series Routers can effectively reduce network OPEX.

Product Compatibility

Table 1. WDM Line Cards Compatible Chassis("●" indicates supported items, "-" indicates unsupported items) (1)

BOM	Order Name	Description	NE20E-S4	NE20E-S8	NE20E-S16	NE20E-S8A	NE20E-S16A
03030RJQ	CR5D08CWD M70	8-Channel CWDM Multiplexing & Demultiplexing (1471/1491/1511/1531/1551/1571/1591/1611nm) Physical Interface Card(PIC)	●	●	●	●	●

Table 2. WDM Line Cards Compatible Chassis("●" indicates supported items, "-" indicates unsupported items) (2)

BOM	Order Name	Description	NE20E-S2E	NE20E-S2F
03030RJQ	CR5D08CWD M70	8-Channel CWDM Multiplexing & Demultiplexing (1471/1491/1511/1531/1551/1571/1591/1611nm) Physical Interface Card(PIC)	●	●

Product Specifications

Table 3. 8-Channel CWDM Multiplexing & Demultiplexing (1471/1491/1511/1531/1551/1571/1591/1611nm) Physical Interface Card(PIC) Specifications

Parameters	Description
Order Name	CR5D08CWDM70
Silkscreen	MD8A-CWDM
Dimensions (H x W x D)	19.8 mm x 193.8 mm x 209.3 mm (0.78 in. x 7.63 in. x 8.24 in.)
Weight	0.7 kg (1.54 lb)
Typical power consumption	1.0 W
Typical heat dissipation	3.2 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Connector type	Optical fiber adapter
Reliability and availability	Support for hot swap

For More Information

For more information about the Huawei NE20E-S Series Routers, visit <http://e.huawei.com> or contact us in the following ways:

- Global service hotline: <http://e.huawei.com/en/service-hotline>
- Logging into the Huawei Enterprise technical support web: <http://support.huawei.com/enterprise/>
- Sending an email to the customer service mailbox: support_e@huawei.com

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