

## Features

- **Fiber on Demand Network Interface Aggregator**
- **Supports scalable and flexible star architectures**
- **One Network and three Local optical ports independently configurable with a variety of 2.125 Gbps SFP transceivers**
- **Network port interfaces to NI3030 Network Interface Module**
- **Local ports support three separate fiber paths**
- **Supports Aurora's Opti-Trace family of management software over a standard IP network**
- **Single width, half-depth module**
- **Hot plug-in/out**

## Aggregator



The AG3034 Aggregator supports 3-way splitting/combining of 2.125 Gbps signals to/from a NI3030 Network Interface Module. With one Network port (interface to the NI3030) and three Local optical ports (each configurable with standard plug-in SFP transceivers), scalable and flexible star architectures can be created by splitting and combining multiple clusters.

The Local ports can be connected, for example, to Aurora's Virtual Hubs or to a DS4004 Optical Ethernet Multiplexer in a standard NC4000 series Optical Node. With a maximum of 16 separate 100 Mbps lines sharing the 2.125 Gbps line rate, the AG3034 Aggregator brings added flexibility to your network.

**Physical:**

- Dimensions:  
6.6" D x 4.3" H x 1.0" W (16.7 cm x 10.9 cm x 2.54 cm)
- Weight:  
1.0 lbs (0.45 kg)

**Environmental:**

- Operating temperature range:  $-20^{\circ}$  to  $+65^{\circ}\text{C}$  ( $-4^{\circ}$  to  $149^{\circ}\text{F}$ )
- Storage temperature range:  $-40^{\circ}$  to  $+85^{\circ}\text{C}$  ( $-40^{\circ}$  to  $185^{\circ}\text{F}$ )
- Humidity: 5% to 95% non-condensing

**Power Requirements:**

- Input voltage (from chassis mid-plane):  
 $12 V_{\text{DC}}$  (420 mA with no SFPs installed; 670 mA with four SFPs)
- Power consumption, max:  
5 W (with no SFPs installed), 8 W (with four SFPs)

**General:**

- Hot plug-in/out
- Optical interface: LC duplex (on pluggable SFP transceivers)
- Optical transmission bit rate: 2.125 Gbps (each of four ports)

**Front Panel:**

- RS-232 port (factory use only)
- Optical ports: one Network port and three Local ports (enabled with SFP transceivers)

**Front Panel Status Indicators and Controls:**

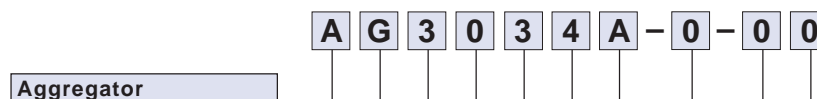
- Module "Status" LEDs:  
Green = OK  
Yellow = non-service-affecting alarm (or alarm history present)  
Red = service-affecting alarm
- Blue "Access" LED: Communications with chassis mid-plane
- Plug-in transceiver port status indicators (separate TX and RX LEDs for each port):  
TX: Illuminated if SFP detected and transmission OK  
Off if transmission fails  
RX: Illuminated if local reception OK  
Blinks if excessive BER  
Off if LOS condition occurs

**Optical:**

*The Network and Local optical ports 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 this port.*

- Network Port (2.125 Gbps) Transceivers
  - TR40xx-PI (transmit at 1310nm for links up to 10 km or 40 km)
  - TR4540-0000-PI (transmit at 1550nm for links up to 40 km)
  - TR4440B-xxxx-PI (transmit at CWDM wavelength of xxxx = 1430, 1450, 1470, . . . , 1610 nm for links up to 40 km)

## Ordering Information

**Note**

Appropriate SFP (plug-in) transceivers for the optical ports must be selected for your application and ordered separately. (Please refer to the list of available SFPs above.)



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