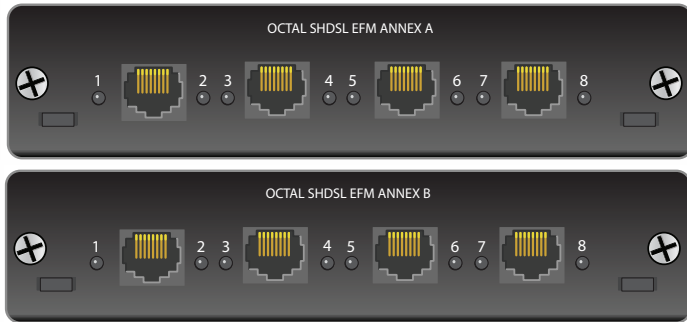


# Quick Start

## NetVanta Carrier Ethernet Octal SHDSL EFM Module

P/N 17806368F1, 17806368F3



### INSTALLATION INSTRUCTIONS

1. Remove power from the base unit.
2. Remove cover from option slot.
3. Slide the option module into the option slot until the module is firmly seated against the chassis.
4. Secure the screws at both edges of the module with a screwdriver.
5. Connect the cable(s) to the associated device.
6. Complete installation of the base unit.
7. Restore power to the base unit.

### SHDSL EFM PINOUTS

Ports 1 and 2			Ports 3 and 4		
Pin	Name	Description	Pin	Name	Description
1	T02	Loop 2 - Tip	1	T04	Loop 4 - Tip
2	R02	Loop 2 - Ring	2	R04	Loop 4 - Ring
3	—	Unused	3	—	Unused
4	T01	Loop 1 - Tip	4	T03	Loop 3 - Tip
5	R01	Loop 1 - Ring	5	R03	Loop 3 - Ring
6-8	—	Unused	6-8	—	Unused

Ports 5 and 6			Ports 7 and 8		
Pin	Name	Description	Pin	Name	Description
1	T06	Loop 6 - Tip	1	T08	Loop 8 - Tip
2	R06	Loop 6 - Ring	2	R08	Loop 8 - Ring
3	—	Unused	3	—	Unused
4	T05	Loop 5 - Tip	4	T07	Loop 7 - Tip
5	R05	Loop 5 - Ring	5	R07	Loop 7 - Ring
6-8	—	Unused	6-8	—	Unused

### SPECIFICATIONS

<b>Operating Modes</b>	Line termination (CO), network termination (CPE)
<b>G.SHDSL Interface</b>	Eight 2-wire eSHDSL loops Supported Standards: Annex A (17806368F1): ITU-T G.991.2, SHDSL Annex A, ANSI T1/E1.4/2001-174 Annex B (17806368F3): ITU-T G.991.2, SHDSL Annex B, ETSI TS101524 IEEE 802.3ah EFM bonding MEF compliant
<b>Clock Source</b>	CO Operating Mode: Internal CPE Operating Mode: Network
<b>Compliance</b>	Annex A: FCC Part 15 Class B, EN 300 386, UL/CUL 60950-1, ACTA/FCC Part 68, IC CS-03, RoHS Compliant Annex B: FCC Part 15 Class B, EN 300 386, AS/ACIF S043, IEC 60950-1 Second Edition, EN 60950-1 Second Edition, AS/NZS 60950.1, RoHS Compliant
<b>Physical</b>	Dimensions: 6.75-inch W x 6.59-inch D Operating Temperature: 0°C to 50°C Storage Temperature: -20°C to 70°C Relative Humidity: Up to 95 percent, noncondensing

### LED BEHAVIORS

LED	Color	Indication
1 through 8	Off	SHDSL loop is administratively shut down.
	Green (flashing)	SHDSL loop is training.
	Green (solid)	SHDSL loop is trained and EFM group is established.
	Amber (flashing)	SHDSL loop is trained but EFM group is not established.
	Amber (solid)	SHDSL loop is in test.
	Red (flashing)	SHDSL loop is in handshake process.
	Red (solid)	SHDSL loop connection failure.

**CAUTION**

- NetVanta Octal SHDSL EFM Option Modules should be installed only in the NetVanta 4660 and NetVanta 6360 products.
- NetVanta option modules are intended to be installed, maintained, and serviced by qualified service personnel only.

**WARNING**

For NetVanta modules with outside plant connections, ensure that all cables are removed from the module before installing or removing it from the NetVanta chassis.

**NOTE**

**Important:** For additional details on product features, specifications, installation, and safety, refer to the appropriate hardware installation guide available online at <http://supportforums.adtran.com>.