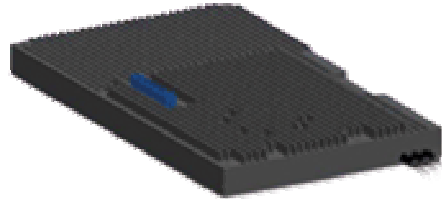


**NP2000VG Variable Gain EDFA**

The NP2000VG is an EDFA with mid stage access and has a dynamic gain range with low gain-tilt and low noise figure. NP2000VG can provide a gain range of 10 to 30 dB. The mid stage loss connected to the amplifier can vary from 5 to 20dB.



NP2000VG is available in APC and AGC modes. The unit has remote firmware upgrade capability.

Features	Applications
<ul style="list-style-type: none"> <li>▪ Full C-band gain spectrum.</li> <li>▪ Dynamic gain range with low gain-tilt and low noise figure.</li> <li>▪ AGC and APC operational modes.</li> <li>▪ Transient response mechanisms.</li> <li>▪ ALS and APR safety mechanisms.</li> <li>▪ Low mechanical profile and low power consumption.</li> </ul>	<ul style="list-style-type: none"> <li>▪ FTTH</li> <li>▪ DWDM, Telecom, Datacom</li> <li>▪ CATV</li> <li>▪ Metro &amp; Long Haul</li> <li>▪ Test &amp; Measurement</li> <li>▪ R&amp;D</li> </ul>



## NP2000VG Variable Gain EDFA

### Optical Performance

Parameter	Min.	Typ.	Max.	Units
Output power (DWDM)	-	-	25	dBm
Gain	10	----	30	dB
Gain accuracy	-	± 0.35	-	dB
Pump wavelength		980/1480		nm
Operating wavelength (C-band)	1529.5	-	1562	nm
Polarization sensitivity	-	-	0.3	dB
Polarization mode dispersion	-	-	0.5	ps
Temperature dependent gain	-	0.5	1.0	dB
Temperature range of operation	0	25	65	°C
Input voltage rating	+4.75	5	+5.25	V
Power dissipation	-	-	16	W
Input/Output Connectors	Customer specific			

### Electrical Connector Pin Out

Connector: AMP 767005-9

Pin	Function	Pin	Function	Pin	Function
1	+ 5VDC	27	Reserved	53	Reserved
2	+ 5VDC	28	Reserved	54	Reserved
3	+ 5VDC	29	Serial Input (RS232)	55	Reserved
4	+ 5VDC	30	Serial Output (RS232)	56	Reserved
5	+ 5VDC	31	Reserved	57	GND
6	+ 5VDC	32	Reserved	58	GND
7	+ 5VDC	33	Reserved	59	GND
8	+ 5VDC	34	High Temp Alarm (Active High)	60	GND
9	+ 5VDC	35	Amplifier Disable Input Preamp (Active High)	61	GND
10	+ 5VDC	36	Output Power Mute Input Preamp (Active High)	62	GND
11	GND	37	Loss Of Signal Alarm Preamp (Active High)	63	GND
12	GND	38	Pump Current Alarm Preamp (Active High)	64	GND
13	GND	39	Output Power Alarm Preamp (Active High)	65	GND

#### NUPHOTON TECHNOLOGIES, INC.

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## NP2000VG Variable Gain EDFA

14	GND	40	Pump Temp Alarm Preamp (Active High)	66	GND
15	GND	41	Loss Of Signal Alarm Booster (Active High)	67	+ 5VDC
16	GND	42	Pump Current Alarm Booster (Active High)	68	+ 5VDC
17	GND	43	Output Power Alarm Booster (Active High)	69	+ 5VDC
18	GND	44	Pump Temp Alarm Booster (Active High)	70	+ 5VDC
19	GND	45	Amplifier Disable Input Booster (Active High)	71	+ 5VDC
20	GND	46	Output Power Mute Input Booster (Active High)	72	+ 5VDC
21	Reset Input (Active Low)	47	Not Present Alarm Preamp (Active High)	73	+ 5VDC
22	Reserved	48	Not Present Alarm Booster (Active High)	74	+ 5VDC
23	Reserved	49	Reserved	75	+ 5VDC
24	Reserved	50	Back Reflection Alarm Booster (Active High)	76	+ 5VDC
25	Reserved	51	Reserved		
26	Reserved	52	Reserved		

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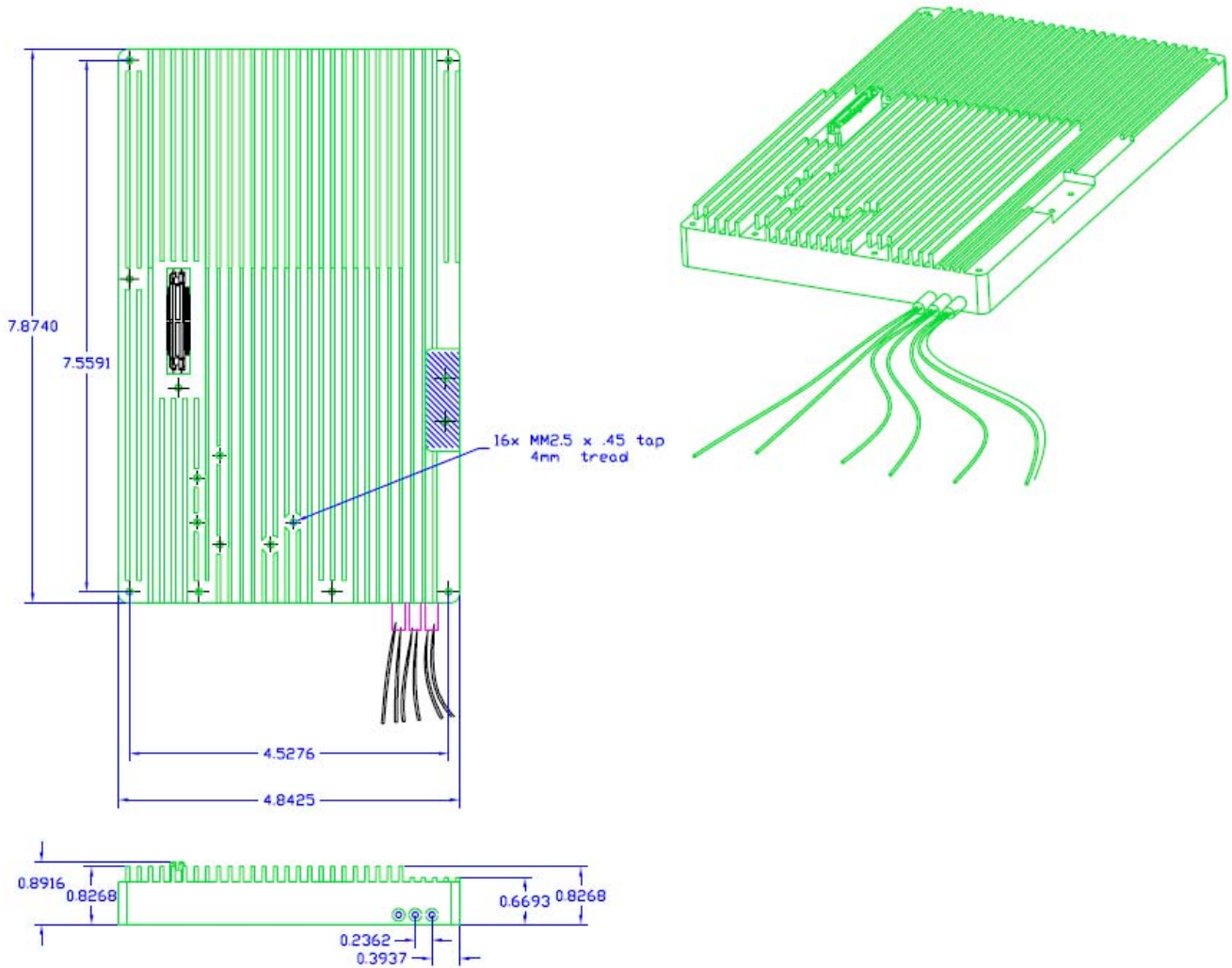
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# NP2000VG Variable Gain EDFA

## Module Package Outline

All dimensions in inches



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# NP2000VG Variable Gain EDFA

## Laser Safety Information

### CLASS IIIb PRODUCT

Single-mode connector

Wavelength = 1550nm, 980nm or 1480 nm

Maximum power = 250 mW



## Ordering Information

NP2000 — [Diagram showing connector and gain block symbols]

Wavelength Range	Package Type	EDFA Type	Output Power (dBm)	Signal Gain (dB)	Connector	No. of Output Ports
C - Band	00 Gain block; No Electronics	B Booster	E.g.: 18 18 dBm	Fixed Gain 2 digits + 00	FCU FC/UPC	01 Single Port
C0 Single Channel		L Line Amp			FCA FC/APC	04 4 Ports
C1 1546 - 1561 nm		P Pre-Amp			SCU SC/UPC	08 8 Ports
C4 1528 - 1563 nm L - Band	MS gain block without electronics	M Mid-Stage		Variable Gain Gain Range Eg: 2300 23 dB (fixed) 1030 10 - 30 dB (variable)	SCA SC/APC	16 16 Ports
L0 Single Channel	MR gain block with electronics				LCU LC/UPC	32 32 Ports
L1 1568 - 1603 nm	RS RS232 gain block with alarms				LCA LC/APC	
L2 1570 - 1605 nm	PR Rackmount / Table top with RS232			000 Other		
L3 1570 - 1610 nm	VG Variable gain					
L4 C & L Band	PM Polarization maintaining					
	CU Custom					

Example: NP2000-C0-MS-B-18-2300-FCU-01

## Contact

For pricing, lead-time and availability please contact:



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