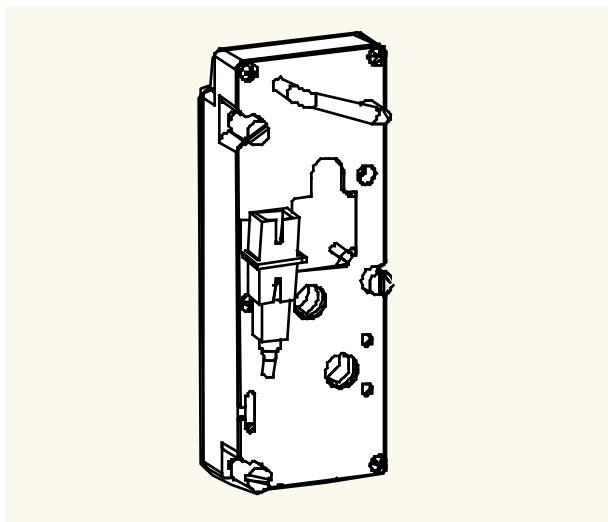


## PWRBlazer™ Scaleable Optical Node Optical Receiver



### Advantages

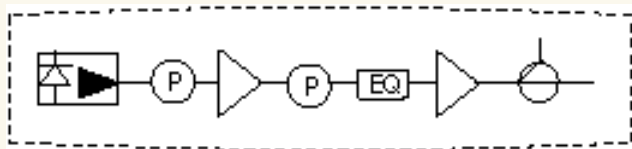
- A 20 dB directionally coupled RF test point and a VDC optical power test point allow easy in-service testing of the optical path.
- An I<sup>2</sup>C interface provides a connection to the NMT 5044 status monitoring transponder for full network control and supervision.

### Product Description

The compact PWRBlazer Scaleable Optical Node optical receiver module (model NRM 3811) uses state-of-the-art GaAs electronics for low noise as well as high sensitivity and gain. For convenient installation and removal, each module has a fiber connector attached to the top. There are also locations for two plug-in pads and a slope equalizer.

Two LED indicators on the module indicate power and optical input below  $-6$  dBm, visually indicating that the module is operating. The module also features an RF output test point to allow troubleshooting of optical links.

### Standard Configuration



### Optical Input

Wavelength: 1300-1600 nm  
Optical input range: -10 to +5 dBm  
Optical return loss: > 45 dB  
Nominal optical input: 0 dBm  
Noise: 7 pA/ Hz  
Responsivity: 0.85 A/W  
Connectors:  
SC/APC NRM 3811-AS  
SC/UPC NRM 3811-US  
FC/APC NRM 3811-AF  
FC/UPC NRM 3811-UF

### RF Output

Nominal output level at minimum full gain: 46 dBmV<sup>1</sup>  
Plug-in options: Slope equalizer and two interstage pads  
Passband: 46-870 MHz  
Frequency response:  $\pm 0.5$  dB  
Slope:  $1.5 \pm 1.5$  dB  
C/N: 54.5 dB<sup>2</sup>  
C/CSO: 70.0 dB<sup>2</sup>  
C/CTB: 76.5 dB<sup>2</sup>

### User Interface

Monitor points:  
Optical power: 1 V/mW  
RF output: -20  $\pm$  1 dB directionally coupled  
LED indicators: 2 power and optical input -6 dBm

### Status Monitor Interface

Interfaces to optional NMT 5044 to allow remote control and monitoring via the NETWatch™ Element Management System of:  
Optical input power-monitor  
Optical alarm-monitor  
Module version-monitor  
Status monitor carrier on/off-control

### Power Requirements

Power consumption: 15 W

### Physical

Dimensions (with plug-ins): 5.5" W  $\times$  2.0" H  $\times$  1.9" D  
14 cm W  $\times$  5.1cm H  $\times$  4.9 cm D  
Weight: 0.7 lbs./0.3 kg

### Notes:

1. At 0 dBm optical input with 4% modulation index
2. At 36 dBmV output level @750 MHz with 10 dB slope, 77 CW carriers, optical input= 0 dBm, without transmitter contribution