

## Single Fiber SFP with Build-in Micro OTDR

Transition Networks provides advanced optical solutions through Intelligent Optical Transceivers. The portfolio includes an SFP with integrated Micro-OTDR that automatically detects, locates and reports optical fiber faults, when installed in a suitable switch. The SFP, is designed in conformance with the Small Form Factor Pluggable 20-pin Multi-Source Agreement (MSA) 2 types of OTDR SFP are available Single fiber and Dual fiber. The Single Fiber Single Frequency transceivers transmit and receive at the same wavelength effectively doubling the optical fiber plant capacity.

Upon disruption of data link, or failure to connect, the unit switches into uOTDR Mode, emitting optical power pulses (>+13 dBm) and detecting the reflected pulses at least down to -42 dBm optical power. Reflection Immune Operation resolves self reflection from an open connector and/or other reflectors.

### Features

- 1.25Gbps/125Mbps bi-directional data link
- Compliant with 1000Base-LX & 100Base-FX
- Single +3.3V Power Supply
- RoHS Compliant
- MSA Compliant
- Integrated OTDR (Optical Time-Domain Reflectometer) function
- Integrated Reflection Immune Operation – Any Network Type
- SFF-8472 Digital Diagnostic Function (DMI)
- 55 dB Dynamic Range for the OTDR
- Dead Zone of 30 meters or less
- Resolution of 10 meters or Better
- Accuracy of 50 meters or Better
- Minimum 20 dB Optical Link Budget
- Low power dissipation <1.5W

### Specifications

Standards	IEEE 802.3 IEEE 802.3z
Dimensions	Width: 0.52" [13 mm] Depth: 2.18" [55 mm] Height: 0.33" [8 mm]
Power Input	3.3V
Environment	Operating: -20°C to +70°C Storage: -40°C to +85°C
Certifications	IEC 60825-1, FDA CDRH 21-CFR 1040.10 Class 1
Warranty	1 Year

### Ordering Information

#### Simplex

#### AF6-155G1-LU-NE

SFP w/OTDR 1000Base-LX/100Base-FX  
1550nm single fiber single mode (LC)  
[40km / 24.9mi.] Link Budget: 20.0 dB

#### AF6-155G1-SU-NE \*COMING SOON\*

SFP w/OTDR 1000Base-LX/100Base-FX  
1550nm single fiber single mode (SC)  
[40km / 24.9mi.] Link Budget: 20.0 dB

#### A06-155G1-SU-NE

SFP w/ Reflection Immune Operation,  
1000Base-LX/100Base-FX, 1550nm single  
fiber single mode (SC) [40km / 24.9mi.]  
Link Budget: 20.0 dB

#### A06-155G1-LU-NE \*COMING SOON\*

SFP w/ Reflection Immune Operation,  
1000Base-LX/100Base-FX, 1550nm single  
fiber single mode (LC) [40km / 24.9mi.]  
Link Budget: 20.0 dB

Note: Other wavelengths, Duplex, and other distance options are available upon request.

\*NOTE: Supported by  
LIB-4424 Series, N2E-306 Series,  
N2E-ATLAS Series