



## DEM-331T

**1000Base-BX-D Single-Mode WDM SFP transceiver (up to 20/40 km), Tx:1550 nm, Rx:1310 nm**

## DEM-331R

**1000Base-BX-U Single-Mode WDM SFP transceiver (up to 20/40 km), Tx:1310 nm, Rx:1550 nm**

The DEM-331T / DEM-331R bidirectional SFP fiber transceivers are external transceivers designed for insertion in SFP (Small Form-Factor Pluggable) slot of network device for transmission and reception of data signals on the fiber cables. These transceivers provide the Gigabit operation and physical compactness to deliver the speed, reliable long-distance data transfer, and deployment flexibility that today's fiber networks require.

The DEM-331T/20KM and DEM-331R/20KM transceivers are used in pair. The DEM-331T/40KM and DEM-331R/40KM transceivers are used in pair.

### Ideal for Long Distance Application

The DEM-331T / DEM-331R transceivers can be used to connect switches, servers and fiber modules on a campus or metropolitan area network (MAN). Providing up to 20 km (DEM-331T/20KM and DEM-331R/20KM) or 40 km (DEM-331T/40KM and DEM-331R/40KM) of fiber cable distance, these highly integrated transceivers offer low jitter performance for advanced optical communication support without any performance degradation.

### Reliable Transmission

The DEM-331T / DEM-331R transceivers combine transmitting and receiving signals onto one fiber strand using two wavelengths. These transceivers are used in pair. At one end, one transceiver uses one wavelength to transmit and a second wavelength to receive. At the other end, the other transceiver flips that relationship.

### Standard Compliance

The DEM-331T / DEM-331R transceivers use standard simplex LC connectors for fiber cable connection. They conform to industry standards and are interoperable with D-Link Gigabit switches. Hot-swap capability allows network administrators to plug or unplug them from the SFP slots without having to turn off the power of the connected device.

**DEM-331T**

1000Base-BX-D Single-Mode WDM SFP transceiver (up to 20/40 km), Tx:1550 nm, Rx:1310 nm

**DEM-331R**

1000Base-BX-U Single-Mode WDM SFP transceiver (up to 20/40 km), Tx:1310 nm, Rx:1550 nm

| General features               |                                                                                                                                                                              |                           |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Model                          | DEM-331T                                                                                                                                                                     | DEM-331R                  |
| Standard                       | IEEE 802.3z 1000Base-BX-D                                                                                                                                                    | IEEE 802.3z 1000Base-BX-U |
| Wavelength                     | Tx: 1550 nm, Rx: 1310 nm                                                                                                                                                     | Tx: 1310 nm, Rx: 1550 nm  |
| Data Rate                      | 1.25 Gbps                                                                                                                                                                    |                           |
| Connector                      | Simplex LC                                                                                                                                                                   |                           |
| Fiber Type                     | 9/125 um Single-mode Fiber                                                                                                                                                   |                           |
| Maximum Fiber Cable Length     | 20 km (DEM-331T/20KM; DEM-331R/20KM)<br>40 km (DEM-331T/40KM; DEM-331R/40KM)                                                                                                 |                           |
| Transmit Power Range           | DEM-331T/20KM<br>DEM-331R/20KM<br>-3 to -9 dBm<br>DEM-331T/40KM<br>DEM-331R/40KM<br>0 to -5 dBm                                                                              |                           |
| Receive Power Range            | -3 to -23 dBm                                                                                                                                                                |                           |
| Sensitivity                    | -23 dBm                                                                                                                                                                      |                           |
| Supported Features             | Hot swap<br>MSA compliant<br>RoHS compliant                                                                                                                                  |                           |
| Physical Parameters            |                                                                                                                                                                              |                           |
| Power Support                  | 3.3 V                                                                                                                                                                        |                           |
| Supply Current                 | 300 mA                                                                                                                                                                       |                           |
| Temperature                    | Operating: 0° to 70°C<br>Storage: -40° to 85°C                                                                                                                               |                           |
| Humidity                       | DEM-331T/20KM<br>DEM-331R/20KM<br>Operating: 0% to 85%<br>Storage: 0% to 85%<br>DEM-331T/40KM<br>DEM-331R/40KM<br>Operating: 5% to 95%<br>Storage: 5% to 95%                 |                           |
| Dimensions                     | 55.9 mm x 13.7 mm x 8.5 mm                                                                                                                                                   |                           |
| Order info                     |                                                                                                                                                                              |                           |
| DEM-331T/20KM<br>DEM-331T/40KM | 1000Base-BX-D Single-Mode WDM SFP transceiver (up to 20 km), Tx:1550 nm, Rx: 1310 nm<br>1000Base-BX-D Single-Mode WDM SFP transceiver (up to 40 km), Tx:1550 nm, Rx: 1310 nm |                           |
| DEM-331R/20KM<br>DEM-331R/40KM | 1000Base-BX-U Single-Mode WDM SFP transceiver (up to 20 km), Tx:1310 nm, Rx:1550 nm<br>1000Base-BX-U Single-Mode WDM SFP transceiver (up to 40 km), Tx:1310 nm, Rx:1550 nm   |                           |

Updated 14/07/2021