



### Features

- + Up to 1.25Gbs bi-directional data links
- + Hot-pluggable SFP footprint
- + Fully metallic enclosure for low EMI
- + Low power dissipation (1.2W typical)
- + Compact RJ-45 connector assembly
- + Access to physical layer IC via 2-wire serial bus
- + 10/100/1000 BASE-T operation in host systems with SGMII interface

### 10/100/1000BASE-T Copper SFP Transceiver

D-Link's DGS-712 1000BASE-T Copper Small Form Pluggable (SFP) transceiver is based on the SFP Multi Source Agreement. It is compatible with the Gigabit Ethernet and 1000BASE-T standards as specified in IEEE

802.3z and 802.3ab. The DGS-712 plugs into any standard SFP interface allowing for 1000Base-T Gigabit transmission over standard Category 5 twisted pair copper.

### Technical Specifications

|                                 |                                                                                                                                                                                                                       |  |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Standard                        | IEEE 802.3ab 1000BASE-T Gigabit Ethernet                                                                                                                                                                              |  |
| Transceiver Type                | SFP (Small Form Pluggable)                                                                                                                                                                                            |  |
| Connector                       | RJ-45                                                                                                                                                                                                                 |  |
| Auto MDI/MDIX                   | + Automatic crossover detection enabled<br>+ External crossover cable not required                                                                                                                                    |  |
| Data Rate                       | + 1,000 Mbps (IEEE 802.3 compatible)<br>+ 10/100/1000 BASE-T operation requires the host system to have an SGMII interface with no clocks. With a SERDES interface, this transceiver will operate at 1000BASE-T only. |  |
| Cable Type                      | Cat. 5 twisted-pair cable                                                                                                                                                                                             |  |
| Maximum Cable Distance Coverage | 100 meters                                                                                                                                                                                                            |  |
| Supply Current                  | + 350mA (typical) + 400mA (maximum)<br>+ 1.3W max power over full range of voltage and temperature                                                                                                                    |  |
| Input Voltage                   | + 3.1V (minimum) + 3.3V (typical)<br>+ 3.5V (maximum) + Referenced to GND                                                                                                                                             |  |
| Surge Current                   | + 30mA<br>+ Hot plug above steady state current                                                                                                                                                                       |  |
| Operating Temperature           | 32° to 185° F (0° to 85° C)                                                                                                                                                                                           |  |
| Storage Temperature             | -40° to 185° F (-40° to 85° C)                                                                                                                                                                                        |  |
| Waranty                         | 2 Years                                                                                                                                                                                                               |  |
| Ordering Information            |                                                                                                                                                                                                                       |  |
| <i>Part Number</i>              | <i>Description</i>                                                                                                                                                                                                    |  |
| DGS-712                         | 1000BASE-T Copper SFP Transceiver                                                                                                                                                                                     |  |