# **SM1G-SR-BT**



# **1000BASE-T Copper SFP Transceiver** for Chelsio Adapters

#### **Features**

- 1 Gbps rate upto 100m with Cat 5 cable
- Hot-pluggable SFP footprint
- Compact RJ-45 connector assembly
- Support for 1000BASE-T
- RoHS compliant and lead-free
- Fully metallic enclosure for low EMI

# **Applications**

• 1.0 Gigabit Ethernet over Cat 5 cable

#### **Specifications**

- IEEE 802.3ab (1000BASE-T)
- SFP MSA1

#### **Regulatory Compliance**

- Class 1 laser products
- US FDA regulatory compliant TÜV and CSA certified
- Meets the Class 1 safety requirements of EN (IEC) 60825 and 60950.

# **Physical and Environmental**

- Operating temperature range 0°C to 70°C
- Power dissipation: 1.05W
- Single 3.3V power supply

# **Compatible Adapters**

- T520-CR
- T540-LP-CR
- T6225-CR
- T6225-SO-CR
- T6225-OCP3

#### **Overview**

Chelsio's SM1G-SR-BT 1000BASE-T Copper SFP RJ-45 transceivers are designed and certified for use with Chelsio's 1/10/25Gb Ethernet Adapters.

The Chelsio SM1G-SR-BT transceiver is compatible with Chelsio's T5/T6based Adapters. The T5/T6 adapters support PCI Express 3.0 host bus interface, and are optimized for storage, cloud computing, HPC, crypto,



virtualization, and other data center applications. The T5/T6 ASIC technology from Chelsio provides the highest performance while dramatically lowering host-system CPU and memory overhead with on-board hardware that offloads TCP/IP, iSCSI, FCoE, NVMe/TCP, and iWARP RDMA processing. As a result, the system benefits from higher bandwidth, lower latency, and reduced power consumption.

#### **Characteristics**

Chelsio's SM1G-SR-BT transceivers are based on the SFP Multi Source Agreement (MSA1) and are fully compliant with the Gigabit Ethernet and 1000BASE-T IEEE 802.3 standards. They support 1000 Mbps full duplex data links with 5-level Pulse Amplitude Modulation (PAM) signals. They also support the 2-wire serial communication protocol defined in the SFP MSA.

The T5/T6 Adapters with SM1G-SR-BT transceiver enable a unified wire for LAN, SAN, and cluster traffic, built upon a combination of high bandwidth and low latency architecture along with a complete set of storage and cluster protocols operating over Ethernet (iSCSI, FCoE, NVMe/TCP, and iWARP). Full Software suite was run with these modules and Chelsio recommends using these modules only with Adapters to allow the Adapter warranty and support structure to remain intact.

# **Ordering Information**

Model: SM1G-SR-BT

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