

# Managed Gigabit 2+2 Ethernet Switch

# TC3340

- **2 Ports 10/100/1000Base-TX (UTP) & 1000Base-SX/LX**
- **Optical Redundancy (ring “self-heals” within 38 msec.)**
- **Ethernet Rate Limit, VLAN & QoS**
- **Built-In Power & Temperature Sensors**
- **Remote Optic Measurements (e.g. Transmit Power & Receive Power)**
- **Network Management (Web, SNMP, Console & Telnet)**
- **SM/MM & Bi-Directional SFP Optics**
- **Extreme-Temp (-40°C to 80°C) & Hi-Temp (-20°C to 70°C) Options**
- **IEC 61850-3, IEEE 1613 & NEMA TS-2**
- **Power: 12VDC, 24VDC, -48VDC or 115/230VAC**



TC3340 Standalone Unit

■ Ideal for mission critical fiber optic ring networks, the TC3340 Managed Gigabit 2+2 Ethernet Switch provides maximum reliability through its sophisticated redundant ring technology. If a fiber cable or device failure occurs, the data path automatically switches over within 38 msec. to the secondary path to maintain ring network integrity.

The TC3340 also converts 10/100/1000Base-TX (UTP) and 1000Base-SX/LX fiber optic networks. Two copper RJ-45 ports and two SFP\* slots are provided. The SFP ports support 850nm multimode and 1300/1550 single mode. The TC3340 supports distances up to 100km (single mode laser) and is available with a “one fiber, bi-directional” option to maximize fiber optic cable usage.

The TC3340 offers a wide variety of advanced networking features including rate limiting, diagnostics and security. Rate Control gives users, especially data service providers, the ability to control or limit bandwidth. For example, rates can be limited to 32Kb, 64Kb, 256Kb, 512Kb, 1Mb, 2Mb, etc.

Diagnostics include unique features such as built-in Power and Temperature monitoring sensors and remote optical measurements for Transmit Power & Receive Power. Standard diagnostics include monitoring traffic statistics, fiber ring status, alarm conditions, etc. Security features include Password Protection, Multiple User Groups and IP Aliasing.

Management is accessed via Web, SNMP, Telnet, or Serial Console. Configuration settings can be saved and loaded to simplify network administration, and firmware can be remotely upgraded. Virtual LAN (VLAN), QoS and Network Time Protocol (NTP) are supported.

The Industrial Hardened version supports temperature ranges from -40°C to 80°C and meets or exceeds all pertinent industrial environmental specifications including IEC 61850-3, IEEE 1613, NEMA TS-2, etc. Standard temperature range is -10°C to 50°C; high temperature version is -20°C to 70°C. Power redundancy is standard and source options include 12 VDC, 24VDC, -48VDC or 115/230VAC. The TC3340 is available in a standalone or wallmount version.



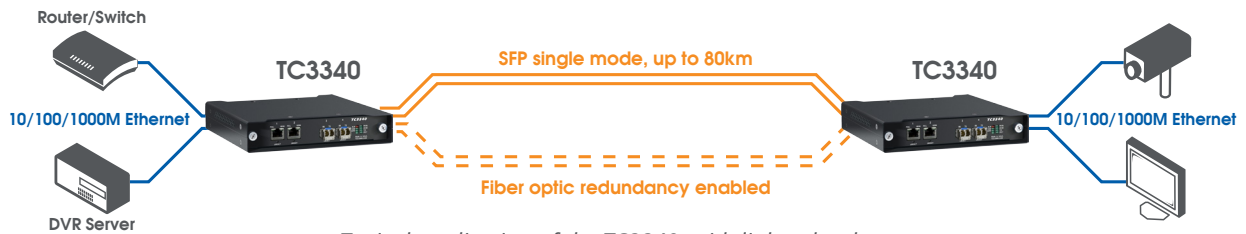
## Applications

The TC3340 is a compact Gigabit Switch solution for both industrial automation and commercial networks because it offers a wide range of advanced networking features including Redundancy, Rate Limiting, Diagnostics, Security and Industrial Hardened capability. It is also used by Data Service Providers for its rate limiting; one fiber, bi-directional; and, media conversion capabilities.

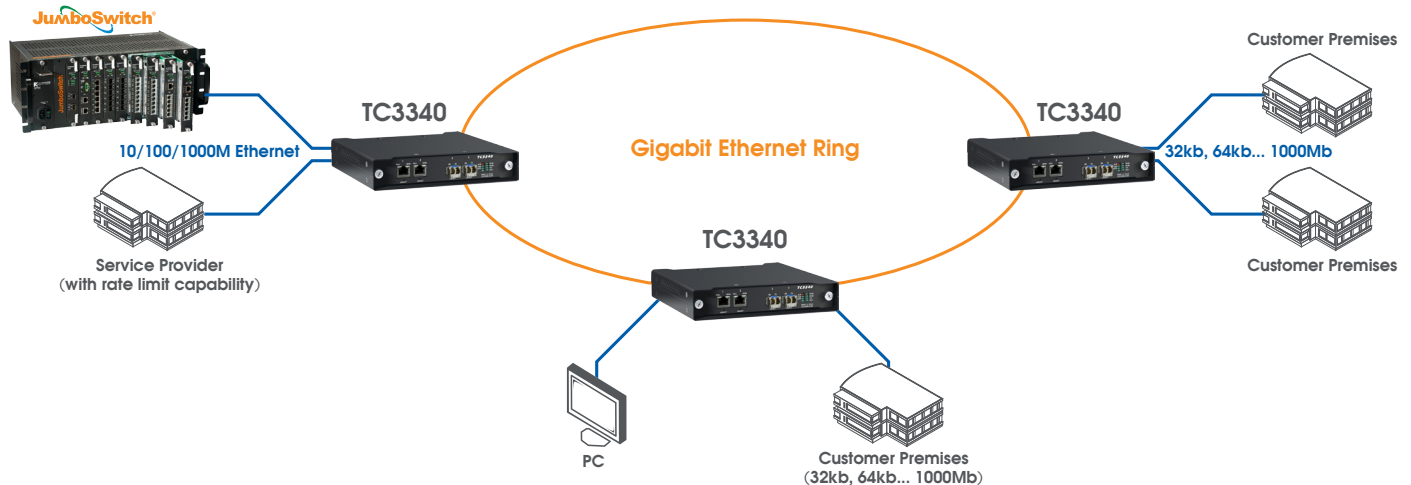
TC Communications, Inc.  
17881 Cartwright Rd. Irvine, CA 92614 U.S.A.  
Tel: (949) 852-1972, Fax: (949) 852-1948

Web Site: [tccomm.com](http://tccomm.com)

\*SFP Transceiver not included



Typical application of the TC3340 with link redundancy



TC3340 using the one-fiber bi-directional option to form a ring network

## Data Rates

.. 10/100/1000 Mbps w/ Rate Control

## Optical

Transmitter .....ELED/LASER\*  
Receiver.....PIN Diode  
Wavelength ..... 850 Multimode  
..... 1300/1550nm Single Mode  
SFP Optic Connectors..... LC  
Loss Budget\* - 1300/1550nm  
Multimode @62.5/125µm ..... 15dB  
Single Mode @9/125µm ..... 20dB

## Electrical

Connector..... RJ45 (10/100/1000M)  
.....SFP: RJ45 (1000M)  
Interface .....Ethernet

## Visual Indicators

ALM, LINK, FULL, 1000M, PWR A,  
PWR B, VCC, DFLT

## System

Bit Error Rate..... 1 in 10<sup>10</sup> or better

## Diagnostic Functions

.....Traffic Statistics  
..... Transmit Power / Receive Power  
..... Temperature

## Alarm

Dry Contact.....Normal OPEN

## Power

Standard ..... 12VDC  
Optional.....24VDC, -48VDC  
.....or 115/230VAC  
Consumption .....< 10W

## Temperature

Operating ..... -10°C to 50°C  
Hi-Temp (opt.) ..... -20°C to 70°C  
Extreme Temp (opt.) .. -40°C to 80°C  
Storage ..... -40°C to 90°C  
Humidity .....95% non-condensing

## Physical (Standalone Unit)

Height..... (3.53 cm) 1.39"  
Width ..... (18.13 cm) 7.14"  
Depth ..... (16.59 cm) 6.53"  
Weight ..... (544 gm) 1.2 lbs

\*Contact factory for higher requirements

Note: Information contained in this data sheet is subject to change without prior notice.



TC Communications, Inc.  
17881 Cartwright Road  
Irvine, CA 92614 U.S.A.  
Factory Tel: (949) 852-1972  
Fax: (949) 852-1948

Sales Office  
U.S.A. Domestic International:  
(949) 852-1973

Web Site: [tccomm.com](http://tccomm.com)



TC Communications Quality  
Management System is certified  
as being in conformity with  
ISO 9001:2015 by Intertek



intertek