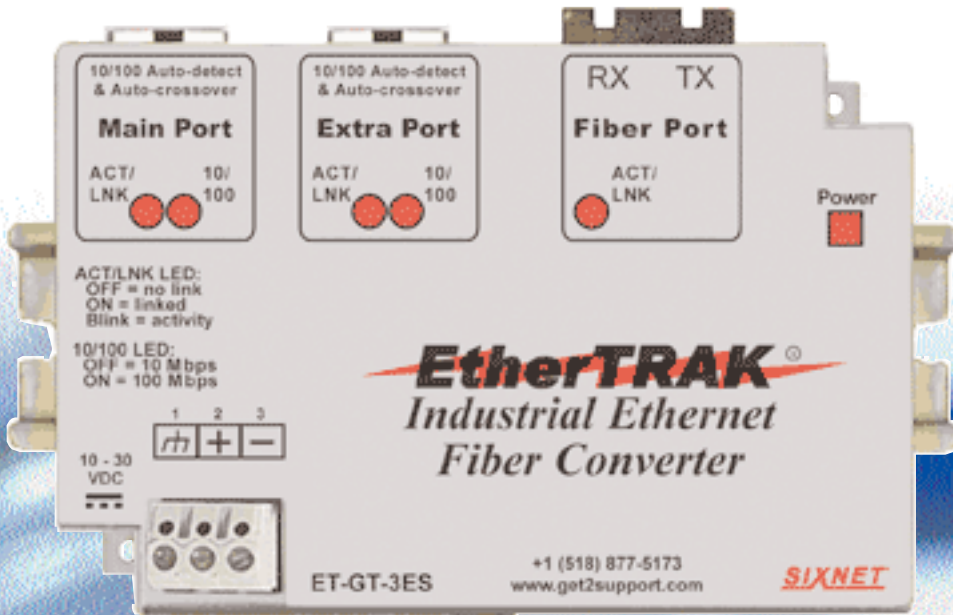


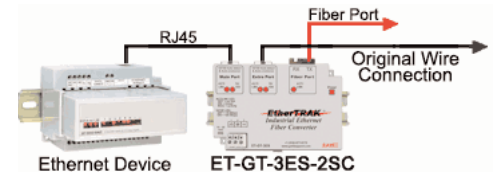
## Industrial Ethernet Fiber Converter

*Add a fiber optic port to any industrial Ethernet device.*

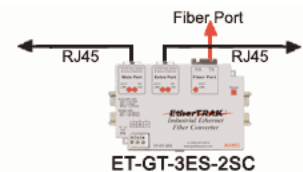


- Works with all 10/100 RJ45 devices
- 100 Megabit fiber optic port
- Extra RJ45 port for flexibility
- -40 to 85 °C operation
- UL 508, CSA, and CE rated
- Marine and Offshore tested
- DIN rail/direct panel mounting
- DC powered-No bulky adapters
- Supports ALL standard IEEE 802.3 Ethernet protocols

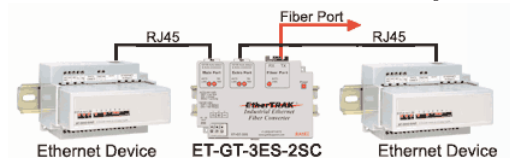
### Fiber-enable any device



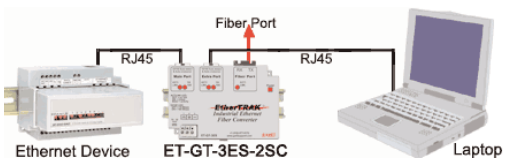
### Add fiber tap to any network



### Link 2 devices to one fiber port



### Use second port for diagnostics





# Make any Ethernet Device "Fiber Optic Ready"



## SIXNET Industrial Fiber Converter

Now, any industrial Ethernet device can connect to a high reliability fiber optic network. This ultra-rugged RJ45 converter is rated for your tough industrial environments. Run the fiber cable right to the place you need it most - the electrical cabinet right on the plant floor.

## Upgrade Older Equipment

Speed up 10BaseT (10 Megabit) Ethernet devices with a 100 Megabit upgrade. This intelligent converter automatically senses speed and provides both a 100BaseTx and 100BaseFx uplink. Be ready for the future with both copper and fiber fast Ethernet ports.



## Why an Industrial Ethernet Converter?

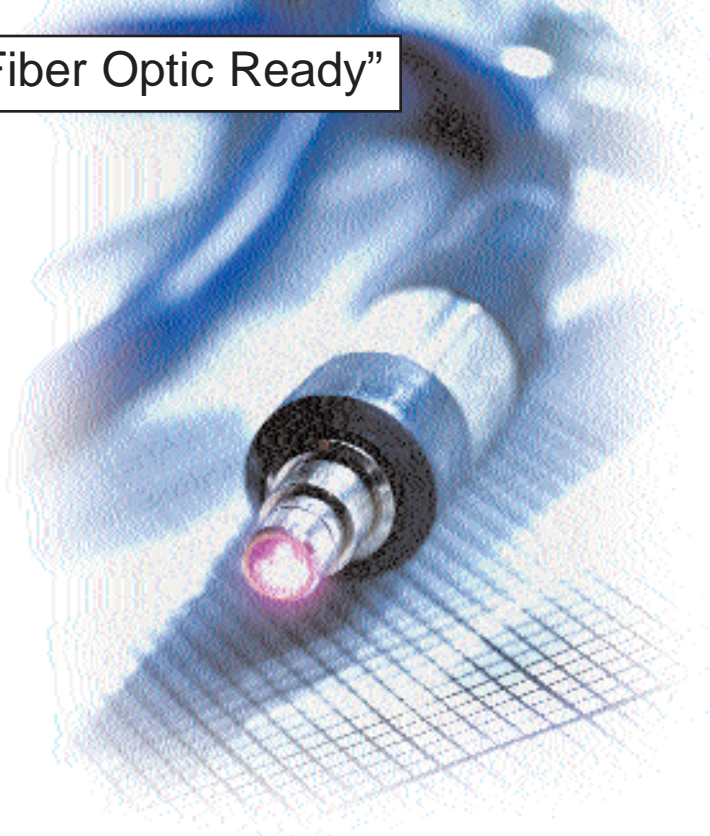
SIXNET industrial converters are designed for industrial environments. Their rugged packaging and protected circuitry keep them working under conditions that may cause cheap office-grade units to fail. Industrial applications are demanding - it gets hot, it gets cold - the power browns out or spikes wildly - and you need a reliable industrial switch that can keep on going.

## Real-time deterministic performance

This converter is built upon industrial Ethernet switch technology. Intelligent message routing avoids collisions and reduces network loading. Increase the throughput of real-time systems and achieve deterministic results.

## Fiber optics increase distance and reliability.

Fiber optic cables are absolutely immune to electrical and magnetic interference. Fiber optics cannot be damaged by voltage transients. You will never spend time tracking down a ground loop in a fiber optic network. This is because an optical cable is not an electrical device. Fiber optic cabling not only enhances reliability, it saves all the time you might have spent tracking down those nasty communications problems. In addition, fiber cables increase the allowable direct cable lengths to 40km or more.



## Industrial converter survives heat & cold

SIXNET industrial converters work reliably through the dead of winter and those hot summer days. Unlike office-grade devices that are intended only for use in air conditioned offices, SIXNET industrial converters are designed for those places that you don't want to be - over a temperature range of -40 to 85 °C.

## Minimize your wiring headaches

Eliminate unwieldy bundles of ethernet cables by placing these efficient wiring concentrators right on the plant floor. Simpler and shorter cabling means higher reliability, too!

## Forget the Velcro and makeshift brackets

SIXNET industrial converters can be DIN rail or direct panel mounted. Their compact footprint fits easily into equipment-filled enclosures.

## Lose those bulky power transformers

SIXNET industrial convertes run directly on the DC power that you already have in your control cabinet. Get rid of those cumbersome AC outlet transformers. No AC power means fewer safety issues. If you ship your equipment internationally, you can forget about the headaches caused by different line voltages and incompatible power plugs.

**SIXNET**

331 Ushers Road, P.O. Box 767 • Clifton Park, NY 12065 USA

+1 (518) 877-5173 • Fax +1 (518) 877-8346 • <mailto:sales@sixnetio.com> • <http://www.sixnetio.com>

## Performance Specifications

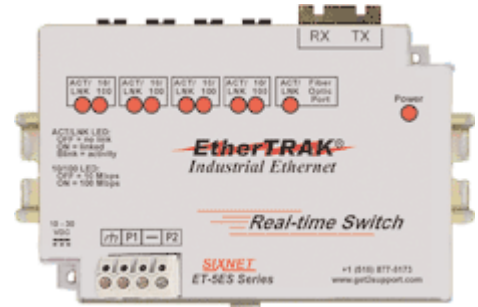
Basic operation	Unmanaged, store & forward	
RJ45 ports (shielded)	10/100BaseT(x)	
RJ45 speed (auto-negotiating)	10 Mbps or 100 Mbps	
Fiber optic port (dual SC or ST)	Multimode or singlemode	
Fiber optic port speed	100 Mbps (100BaseFX)	
Fiber port wavelength	1300 nm center	
Optimal fiber multimode (mm)	50/125 um, 62.5/125 um	
Optimal fiber singlemode (sm)	9/125 um, 10/125 um	
Fiber maximum distance	4 km (mm), 20 km (sm) or 40+ km	
Ethernet protocols supported	All standard IEEE 802.3	
Memory bandwidth	3.2 Gbps	
Completely compliant	IEEE 802.3 & IEEE 802.3u	
Full or half duplex operation	Auto-sensing on RJ45 ports; Switchable on fiber port	
MAC addresses supported	1K (automatic learning, aging, and migration)	
Ethernet isolation	1500 VRMS 1 minute	
Required supply voltage	10-30 VDC	
Power consumption (typical)	2 W	
Operating and storage temp.	-40 to +85 °C	
Humidity (non-condensing)	5 to 95% RH	
Flammability	UL 94V-0 materials	
Electrical safety	UL 508, CSA C22/14; EN61010-1 (IEC1010)	CE
EMI emissions	FCC part 15, ICES 003, EN55022, Class B	CE
EMC immunity	EN61326-1 (EN61000-4- 2, 3, 4, and 6)	CE
Surge withstand	IEEE-472	
Vibration	IEC68-2-6	
Hazardous locations	UL 1604, CSA C22.2/213 (Class 1, Div. 2), Cenelec EN50021 (Zone 2)	
Eye safety (fiber models)	IEC60825-1, Class 1; FDA 21 CFR 1040.10 and 1040.11	



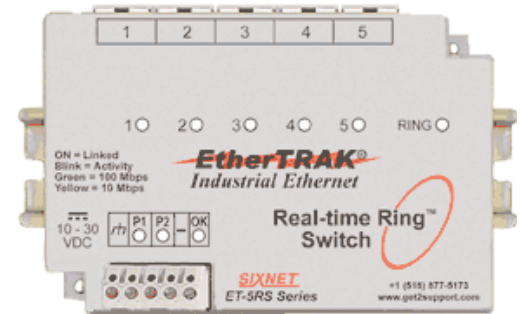
## Ordering Information

Part Number	Description
ET-GT-3ES-2SC	Fiber converter with 2 RJ45 and 1 SC style fiber port (multimode)
ET-GT-3ES-3SC	Fiber converter with 2 RJ45 and 1 SC style fiber port (singlemode)
Ethernet Switches	Refer to Ethernet Switch Datasheet
<b>NOTE1:</b> For ST style connectors just substitute "ST" for "SC" in the part numbers above.	
<b>NOTE2:</b> Contact SIXNET for singlemode long haul fiber ports for 40 km or more.	
Accessories	
RM-PS-024-01F	Universal AC/DC power supply (24 VDC, 1 AMP)
SP-ETH-2	Ethernet surge & lightning protector (protects 2 RJ45 ports)
<b>NOTE:</b> Each SP-ETH-2 includes a grounding kit and two Ethernet patch cables.	

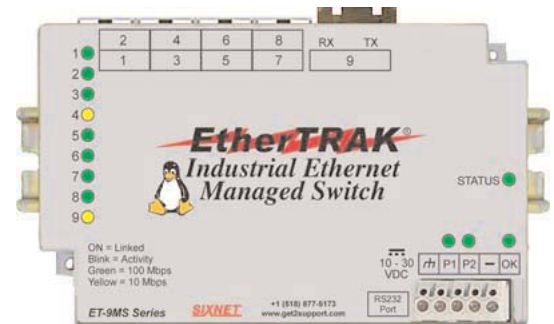
## Other SIXNET Industrial Switches



Five & nine port switches for small automation cells



Real-time Ring™ Switches for fault-tolerant rings



Managed Switches with SNMP, VLAN, IGMP, and much more



### Complete Documentation

is provided on the SIXNET CD or may be downloaded from <http://www.get2support.com>. Includes applications help for many common situations.

**Contact your SIXNET Applications Engineer today!**

For instant availability and the latest product information check out <http://www.sixnetstore.com>

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# A Complete Family of I/O Solutions

## Ethernet I/O



## Remote Terminal Unit



## Industrial Phone Modems



## Ethernet and RS485 I/O

SIXNET can provide you the building blocks for the open systems you are looking for. Three complementary families of modular DIN rail mounted I/O provide local, remote, enterprise level, or Internet I/O solutions.

## Ethernet-Ready RTU

SIXNET IPm is a combination of installation-ready industrial controllers & RTUs and a wealth of powerful software solutions. IPm offers the reliability of a PLC, the familiarity of powerful Windows programming and configuration utilities, all combined with powerful open-source Linux flexibility.

## Industrial Modems

SIXNET rugged industrial modems eliminate the hassles of mounting a telephone modem in an industrial enclosure. These robust modems are rated for -30 to +70 °C industrial operation.

## TrakPAK Packaged Systems

SIXNET delivers complete I/O cabinets that come to you designed; built; tested; and ready for installation.



Converter Datasheet REV06-05

Contact your SIXNET Applications Engineer today!

For the latest information, check out  
<http://www.sixnetio.com>

**SIXNET**