VOLKTEK

IMC-561

1 x 10/100/1000 RJ45 to 1 x FX/GbE SFP Industrial Converter

Description

The IMC-561 Unmanaged Industrial Media Converter converts Ethernet signal to fiber optic signal specifically engineered to offer an affordable solution for industrial systems. Built with rigid IP30 metal housing to withstand wide operating temperature from -10°C to 60°C, the media converter can operate consistently even in harsh industrial environments. The IMC-561 is featured with intelligent functions like Auto MDI/MDIX for easy plug-and-play, faster link fault diagnosable through LFS (Link Fault Signaling) and LLB (Line Loopback), easy-to-monitor LEDs, easy-to-control DIP switches. These features offer non-stop industrial networking and minimize downtime for mission-critical networks.

Featuring one 10/100/1000Mbps copper port, the IMC-561 can easily connect to any others switch/hub/PLC where the single multi-rate 100/1000Mbps SFP slot offers fiber advantages for secured data transmissions over long distances to mission-critical networks. Expanding the network from fast to Gigabit, IMC-561 is considered as a reliable solution for keeping harsh industrial applications running continuously.

RoHS

Features Highlight

Robust Switch Performance

With an industrial metal housing case, IP30, surge and ESD protection, the IMC-561 provides a high level of immunity against electromagnetic interference and heavy electrical surges, thus facilitating easy deployment in demanding environments. Along with, the converter is incorporated with Reverse Polarity Protection which prevents from huge internal circuitry damage and Over Current Protection to safeguard the device during sudden increase of current flow.

Fault-tolerant and User-friendly Monitoring

Network administrators can now easily monitor and troubleshoot issues associated with device functionality and link activity using the advanced features of IMC-561. LFS (Link Fault Signaling) enables you to easily detect optical signal strengths and faulty links on both copper and fiber ports. And LLB (Line loop back) allows you to remotely isolate and localize network problems, thereby significantly minimizing network downtime. In addition, the LEDs on the device convey essential diagnostic and status information of device power, link activity on ports etc. allowing you to easily monitor without having to get into tight spaces.

Redundant Power Supply

Considering the single power circuit failure impact in heavy industrial applications, IMC-561 is developed with standard “6-pin Terminal Block” for redundant power to provide continuous service resulting reliable and consistent network. In addition, the switch is equipped with alarm feature to notify the occurrence of power failure, helps in quick respond and faster trouble shooting.

Easy Plug-and-play Operation

Being compact in size, IMC-561 media converter is an easy-to-setup and ready-to-use solution for any application system. Featuring Auto-MDI/MDIX and Auto-negotiation, the media converter automatically detects and configures the best mode of operation over a link. This eliminates the need for user setup or configuration procedure and simplifies installation, once installed these media converters operate automatically.

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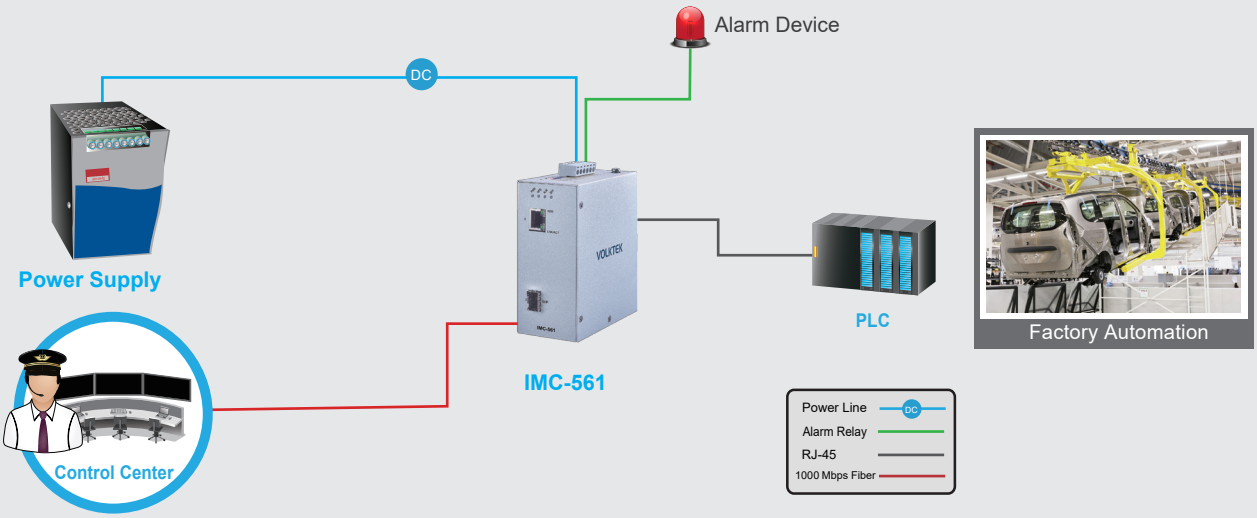
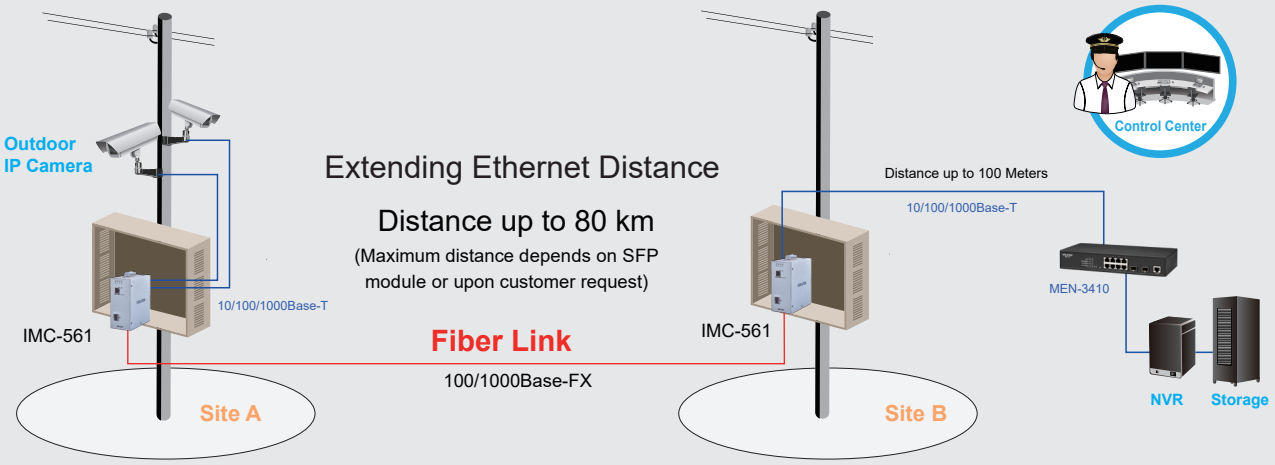
Applications

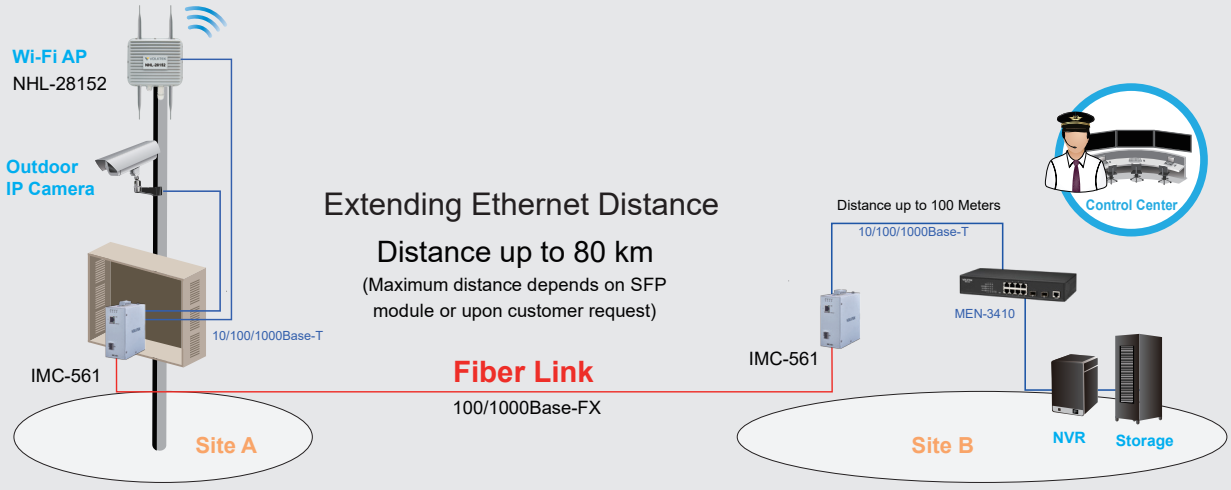
Scalable Ethernet plus Easy Fiber Extension to Control Room

The IMC-561 is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet providing flexible deployment options to satisfy industrial networking requirements. Addition to this, the switch can be easily extended to control center with hassle-free fiber to facilitate central controlling for harsh industrial applications.



Fiber-Optic Link Capability Enables Extension of Network Deployment





* The diagram illustrates a typical application for the IMC-561 media converter. The actual distances will depend on several factors, including the quality of cables used and the terminal equipment employed.

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Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX/FX
IEEE 802.3ab	1000BASE-T
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.3x	Flow Control
IEEE 802.3az	Energy Efficient Ethernet (EEE)
Interface	
Ports	1 x 10/100/1000BASE-T (RJ45)
	1 x 100FX/GbE SFP Slot
LED Panel	PWR, RPS, ALM, SFP slot, 1000, LNK/ACT
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
Features	
Performance	Jumbo Frame size: 10K
	MAC table size: 8K
	Fabric: 4Gbps
	Packet buffer: 1Mbit
Management	Device Monitoring: LFS (Link Fault Signalling)
	Device Management: LLB (Line Loopback)
	Security: Port Isolation
Power	
Input Voltage	Primary: 20~57VDC
	Redundant: 20~57VDC
Power Connection	6-pin Terminal block (Primary/Redundant Power Input)
Power Input Polarity Protection	Present
Power Voltage Drop Alarm	Primary/Redundant Power Input
Alarm Relay	One relay output with current carrying capacity of 1A @ 24V DC
Power Consumption	5.5W
ESD Protection	Present
Surge Protection	Present
Device Monitoring & Management	
Device Monitoring	LFS (Link Fault Signalling)
Device Management	LLB (Line Loopback)
Security	Port Isolation

Mechanical and Environment		
Housing		Metal Case (IP30 protection)
Mounting		DIN-Rail, Wall Mount (optional)
Operating Temperature		-10°C~60°C (14°F~140°F)
Storage Temperature		-40°C~85°C (-40°F~185°F)
Operating Humidity		5 to 95% RH (non-condensing)
Storage Humidity		5 to 95% RH (non-condensing)
Weight		380 g (0.84 lb)
Dimension (WxHxD)		50 x 116 x 100 mm (1.97 x 4.56 x 3.93 in)
Certifications		
FCC		Part 15 Subpart B Class A
CE	EMI	EN 55022 class A
		VCCI
	EMS	EN 55024
		EN 61000-4-2 (ESD)
		EN 61000-4-3 (RS)
		EN 61000-4-4 (EFT)
		EN 61000-4-5 (Surge)
		EN 61000-4-6 (CS)
		EN 61000-4-8 (PFMF)
Approval & Test		
Shock		IEC 60068-2-27
Freefall		IEC 60068-2-32
Vibration		IEC 60068-2-6
Ordering Information		
IMC-561		1 x 10/100/1000 RJ45 to 1 x FX/GbE SFP Industrial Converter, -10°C~60°C (14°F~140°F)
Optional Accessories		
FPM-107		100BASE-FX Multi-mode SFP, 2Km
GBM-132TS		100BASE-FX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 20Km, 0°C~70°C (32°F~158°F)
GBM-132RS		100BASE-FX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 20Km, 0°C~70°C (32°F~158°F)
GBM-104		1000BASE-SX 1.25G, Multi-mode SFP, 500m
GBM-123TS		1000BASE-LX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 10Km, 0°C~70°C (32°F~158°F)
GBM-123RS		1000BASE-LX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 10Km, 0°C~70°C (32°F~158°F)

Note :

** The SFP communication distance upon the request.*

** Industrial SFP with wide operating temperature from -40°C~85°C (-40°F~185°F) is available upon request.*

** Specifications subject to change without notice.*

Dimension