

RS-232 / RS-422 / RS-485 over Fast Ethernet Media Converter



Cost effective solution for RS-232 / RS-422 / RS-485 to Ethernet application

PLANET ICS-10x series Media Converter / Device Server provide to converts Serial RS-232 / RS-422 / RS-485 communication interface over Fast Ethernet networking. There are RJ-45 and SC connectors and single-mode/multi-mode media for your needs. Ethernet signal that allows two types of segments to connect easily, efficiently and inexpensively. This converter can be used as a stand-alone unit or as a slide-in module to the PLANET Media Converter Chassis (MC-700, MC-1000 and MC-1500). It's time saving expense for user and SI, no need to replace the existing Serial equipment and software system.

Extend distance

It extends the distance of deploying Serial equipments and hosts. The selectable fiber-Optic wires on the basis of distance are provided. Therefore, this product will perfectly satisfy the diverse demands while providing reliable and efficient network solutions based on the distance and budgets of installation.

Remote Manageable

The ICS-10x make connected Serial equipment becomes IP-based. That also makes them be able to connect to a TCP/IP networking immediately. Each Web-Smart converter is able to manage Web Interface. The powerful Web-Smart Media Converter supports Application mode, Serial operation mode connect alarm and IP address, etc. It helps reduce the amount of valuable time that a network administrator spends detecting and locating network problems, otherwise it requires visual inspection of cabling and equipment. Multiple connection options for large networking environment are available as well.

KEY FEATURES

SERIAL INTERFACE

- One RS-232/422/485 port to one 10/100Base-TX or 100Base-FX Media Converter
- Cost effective solution for RS-232 to Ethernet application
- Supports RS-232, 4-wire RS-422 or 2/4-wire RS485 operation
- Asynchronous serial data rates up to 921600b/s

ETHERNET INTERFACE

- Complies with IEEE 802.3, IEEE 802.3u 10/100Base-TX, 100Base-FX standard
- Supports auto MDI/MDI-X function on RJ-45 Port
- Choice of fiber-connector from SC, multi-mode / single-mode fiber

SMART FUNCTIONS

- Standard TCP/IP interface and versatile operation modes
- Software Protocol Support ARP, ICMP, TCP/IP, UDP, HTTP server, DHCP client, Telnet server/client
- Built-in IP-Base Web interface for remote management
- Serial Operation mode selected via Web management
- Pair Connection mode for connecting two serial devices over a network
- PLANET Smart Discovery utility automatically finds xxx devices on the network
- Firmware upgrade via HTTP protocol

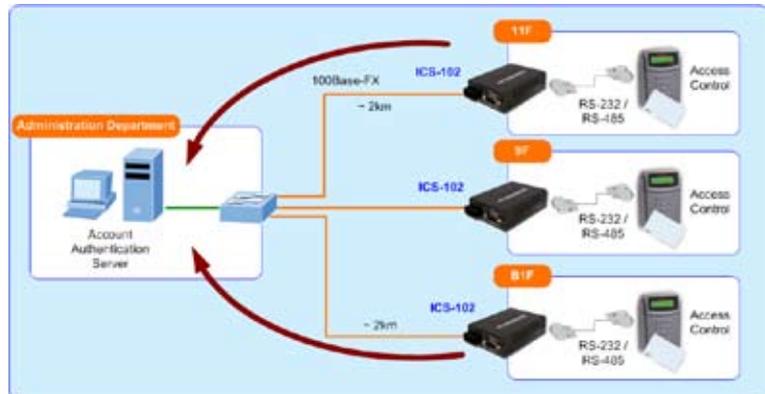
HARDWARE

- Compact size for easy Installation:
 - > Standalone - Wall mountable or DIN-Rail mounting (Optional accessory)
 - > Co-work with PLANET MC family Media Chassis (MC-700/1000R/1500)
- LED indicators for easy network diagnose
- Reset Button at the front panel for reset to factory default

APPLICATIONS

Access Control System – traditional installation

Most of the enterprise and government use access control plate and Mifare or RFID to authorize entrance identity. With traditional deploy, access control machine use RS-232 or RS-485 serial interface and cables connect to login server. With connection to ICS-10x Serial over Fast Ethernet Converter, the access control machine is able to be extend over longer distances via fiber optical interface. The distance can be up to 20km in a local range. Or the ICS-10x can be linked to a XDSL router to get the internet access capability; the access control can be set and monitored over the internet.



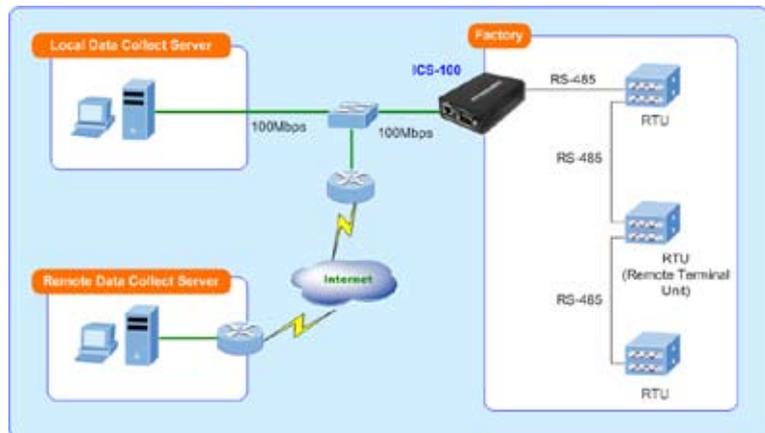
Process Control

To monitor, configure and manage the Robot conveyer including other machines in manufacturing, PLC (Programmable Logical Control) is required. The PLC is used to drive above the manufacturing process. The ICS-10x can be set to TCP Server mode and connect the PLC. The administrator can configure and set command settings through Fast Ethernet intranet to control the PLC, the administrator and workstation. There is no need to be always by the side of the I/O machine.



RTU Data Collect – UDP Mode

Connect with RTU (Remote Terminal Unit) to collect and monitor the data of waves, signal and power utilization. ICS-10x can be used set-up UDP mode and send data over Fast Ethernet to Local server or over internet to remote server automatically.



Surveillance motion control – Pair Connection Mode

Using pair connection along with fiber optical patch cord, the ICS-10x extend RS-232 / RS-422 / RS-485 interfaces distance from surveillance and scanner to the control keyboard/joystick which is installed in the remote monitor center.



SPECIFICATION

Product	RS-232 / RS-422 / RS-485 over Fast Ethernet Media Converter		
Model	ICS-100	ICS-102	ICS-102S15
Serial Port			
Interface	RS-232 / RS-422 / RS-485		
Connector	3-in-1 DB9		
Baud rate (Data Rate)	110bps to 921K bps		
Data Bits	5,6,7,8		
Stop Bit	1,2		
Flow Control	None, RTS/CTS, Xon/Xoff		
Signals	RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND RS-422: Tx+, Tx-, Rx+, Rx- RS-485(2-wire): Data+, Data- RS-485(4-wire): Tx+, Tx-, Rx+, Rx-		
Fast Ethernet Port			
Standard	10/100Base-TX	100Base-FX	
Connector	RJ-45	SC	
Mode	-	Multi-Mode	Single Mode
Distance	100m	2km	15km
Optical Wavelength	-	1300nm	1310nm
Cable	Twisted-pair	50/125µm or 62.5/125µm multi-mode fiber cable	9/125µm single-mode cable
Protection	Built-in 1.5KV magnetic isolation		
Hardware			
LED Indicators	System: Power TP or Fiber Port: Link / Active Serial Port: Serial port mode, RS-232, RS-422 or RS-485		
Management	Web Management PLANET Smart Discovery Utility VCOM		
Operation Mode	Virtual COM Port TCP Server TCP Client UDP Client Pair Connection		
Dimension(W x D x H)	97 x 70 x 26 mm		
Weight	200g		
Power Supply	External Power Adaptor 5V DC / 2A max.		
Power Consumption	5.5 Watts (max)		
Mechanical	Metal		
Environment	Operating Temperature: 0~50 Degree C Storage Temperature: -10~70 Degree C Operating Humidity: 10%~90% RH Storage Humidity: 5%~90% RH		
Emissions	FCC Class A, CE Certification Class A		
Standards	<ul style="list-style-type: none"> • IEEE 802.3 10Base-T, • IEEE 802.3u 100Base-TX / 100Base-FX • EIA/TIA RS-232/422/485 		
Regulatory Approval	RoHS		
Compatible Media Converter Chassis	MC-700 / 1000R / 1500		
Note.	Reset Button at the rear panel for reset to factory default		

ORDERING INFORMATION

<i>ICS-100</i>	RS-232/422/485 over Fast Ethernet Media Converter (RJ-45) – 100m
<i>ICS-101*</i>	RS-232/422/485 over Fast Ethernet Media Converter (ST, MM) – 2km
<i>ICS-102</i>	RS-232/422/485 over Fast Ethernet Media Converter (SC, MM) – 2km
<i>ICS-102S15</i>	RS-232/422/485 over Fast Ethernet Media Converter (SC, SM) – 15km
<i>ICS-105A*</i>	RS-232/422/485 over Fast Ethernet Media Converter (SFP) – Vary on module
(*):	Upon by request

ACCESSORIES

<i>RKE-DIN</i>	DIN-Rail Mounting Kit
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AVAILABLE MODULES

<i>FT-80x</i>	10/100Base-TX to 100Base-FX Fast Ethernet Media Converter
<i>FT-90x</i>	10/100Base-TX to 100Base-FX Web Smart Media Converter
<i>FST-80x</i>	10/100Base-TX to 100Base-FX Fast Ethernet Media Converter
<i>IFT-802</i>	Industrial 10/100Base-TX to 100Base-FX Smart Media Converter
<i>MC-700</i>	10" 7-Slot Media Converter Chassis
<i>MC-1000R</i>	19" 10-Slot Media Converter Chassis (Optional Redundant Power)
<i>MC-1500</i>	19" 14-Slot Media Converter Chassis