



I4x

Communication Interface



The I4X is a range of Communications interfaces designed for use with the AREVA range of ISTAT I400 communicating transducers, ISTAT M2x0 and ISTAT M2x1 communicating measurement centres. They can convert Ethernet to RS232 or RS485, or RS232 to RS485.

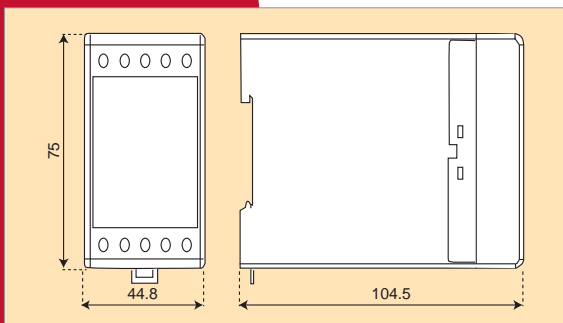
- > Transmission rates from 1,200 to 115,200 bits per second
- > LED for communications indication
- > Suitable for DIN rail mounting
- > Universal ac/dc auxiliary power supply
- > Low power consumption

The I4X allows a master station using an Ethernet or RS232 port to connect to a maximum of 32 devices. ISTAT products run MODBUS RTU protocol but other protocols can be used with the I4X interface.

The I4X used for Ethernet circuits has an RJ45 10/100 socket. On the EIA RS232 or RS485 side screw terminals are provided for the communications twisted pair wires.

Devices are linked with a screened twisted pair of wires, an arrangement developed for use in electrically hostile environments, on a single spur with a maximum run of 1000m

When used with IDSP it allows the operator access to the setting files within the devices. These can then be read and changed as required.



DIN RAIL MOUNTING

The I4X is designed to mount on a standard rail (35mm x 15mm).

ASSOCIATED SOFTWARE

IDSP Setting software.
IDNE Network Explorer
These are used with the communicating devices within the following ISTAT products:

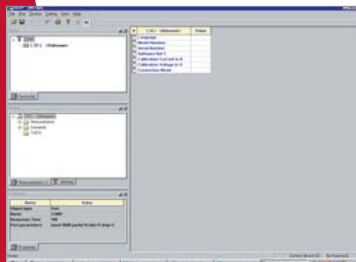
I400 Digital Transducers
M2x0 Measurement Centres
M2x1 Measurement Centres

IDSP and IDNE are available as a free downloads from the AREVA T&D web site.

In addition, where the Ethernet converter is required, each device is supplied with unique MAC number and installation software to allow Ethernet port configuration on your computer.

Customer benefits

- Connection of up to 32 devices
- Suitable for DIN rail mounting
- Universal ac/dc power supply



INFORMATION REQUIRED WITH ORDER

	I	4	X	?	4	U	2
Type							
RS232 D connection				D			
RS232 Screw connection				S			
Output Port EIA RS485					4		
Universal Auxiliary supply						U	
Input Port EIA RS232							2

Complete the model number by selecting the type of RS232 connection that is required.

	I	4	X	S	?	U	E
Type							
Output Screw connection				S			
EIA RS232 port					2		
EIA RS485 port					4		
Universal Auxiliary supply						U	
Ethernet RJ45 port							E

Complete the model number by selecting the type of RS output connection that is required.

EUROPEAN UNION DIRECTIVES

> CE Marking

Low voltage directive 73/23/EEC : EN61010-1 :1993 and EN61010-A3 :1995 Safety requirements for electrical equipment for measurement, control and laboratory use, Part 1 General requirements

EMC directive 89/336/EEC : EN61326-11 :1997 Electrical equipment for measurement, control and laboratory use, Part 1 General requirements

TECHNICAL INFORMATION

> Ethernet Communications

Connector : RJ45 10/100 copper
 Isolation : 3.7kVrms for 1 minute between all terminals and all other circuits.
 Data rate : 1200 to 115200 bps

> EIA RS232 Communications

Connection type: Point to point
 Signal level : EAI RS232
 Maximum cable length : 15m
 Connector : DB9 or screw terminals
 Isolation : 3.7kVrms for 1 minute between all terminals and all other circuits.
 Transmission mode : Asynchronous
 Data rate : 1200 to 115200 bps

> EIA RS485 Communications

Connection type: Multidrop
 (maximum of 32 connections)
 Signal level : EAI RS485
 Cable type : Screened twisted pair
 Maximum cable length : 1000m
 Connector : screw terminals
 Isolation : 3.7kVrms for 1 minute between all terminals and all other circuits.
 Transmission mode : Asynchronous
 Data rate : 1200 to 115200 bps

> Universal Auxiliary Supply

Rated voltage (Ur): 24...300 V DC
 40...276 VAC
 Frequency range: 40...70 Hz
 Power consumption : <3 VA

> Housing

Material: PC/ABS unflamable
 to UL95 V-0
 Mounting : Rail mounting 35 x 15mm to
 DIN EN50022 :1978
 Enclosure protection: IP50 (IP20 for terminals)
 to EN60529 :1989
 Weight: approx 300g

> Regulations

Protection: Protection class II
 500Vrms, installation class III,
 Pollution degree 2
 Test voltage: 3.7kVrms to EN60688 :1992
 Climatic rating: Climate class 3
 to EN60688 :1992
 Operating temperature : -10 to +55 degree C
 Storage temperature : -40 to +70 degree C
 Annual mean relative humidity : ≥75% rh

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