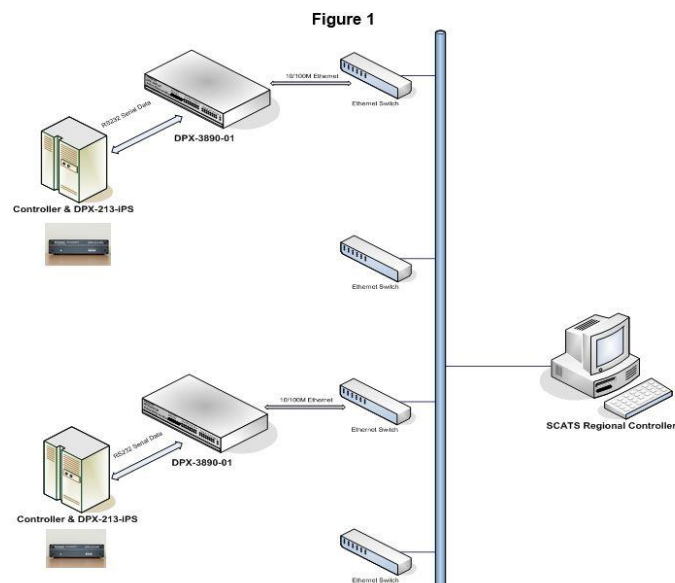# DPX-3890 8-Port Industrial & DPX-213-iPS Modem

Product Description

How the DPX-3890-01 and DPX-213-iPS Works in a SCATS® Network

The DPX-3890 is designed to be connected, via a serial port, to multiple remote controllers, consisting of DPX-213-iPS devices. This is connected back to the SCATS® Regional Computer via a distributed Ethernet network using Ethernet Switches. Each of the DPX-3890-01 devices has a separate IP address to ensure that SCATS® can control, transmit and receive correct data from the unit.

Figure 1

Permanent Dial-up is robust and simple replacement communications solutions. It is quick to deploy with deployment records showing that approximately five sites per hour is easily achievable.

The DPX-213-iPS: Controller-end Device

The DPX-213-iPS features:

- Internal Power Supply – 180 ~ 280V AC 50Hz (30mA)
- Rugged metal case
- Remote configuration
- Compact size (Width x Depth x Height)- 200mm x 130mm x 55mm
- MNP error correction and data compression
- Automatic terminal speed detection from 300 to 9,600bps
- Data operation at 300, 1200, and 2400bps
- CCITT (International Telegraph and Telephone Consultative Committee) standards V.21, V.22, and V.22bis
- Bell 103 and Bell212 support
- Power hold-up feature: Holds power for up to 20 seconds with full operation
- DTR raise and AT command dialling
- Help notes on configuration, S-registers, and AT prompts
- Manufactured to ISO-9001:2000 Quality Standards and Quality Management Systems requirements
- RTA Type Approval number: 200808-SP021-2.0-1
- Office and Fair Trading – Certificate of Suitability – CS9038
- AS/NZS 60950.1:2003 safety approved
- RFI compliant to Surge test: AS/NZS 61000-4-5:2006 and AS/NZS CISPR-22:2006
- Environmental Test Certificate Number: Vipac 20E-08-0108-COC-736243-0
  - o Humidity: Accordance with RTA Specification TSI-SP-021 (-10 ~ +70 degrees) 90% Humidity
  - o Vibration: Accordance with IEC60068-2-6
  - o Bump: Accordance with IEC60068-2-29

The DPX-3890-01: Regional Computer End

The DPX-3890-01 is a modem rack designed to provide a network connection to the SCATS® regional computer, effectively eliminating the need for multiplexers and therefore allowing for significant cost savings as well as attending to the criteria established above.

Dimensions

The unit is 1 rack unit in height and can fit into a standard 19-inch rack – (Width x Depth x Height): 435mm x 370mm x 44mm.

How It Works

The DPX-3890-01 has:

- Eight two wire line modems which can carry user serial data to and from remote modems and any connected equipment
- An on board line isolation for each of the two wire line modems
- a 10M/100M Ethernet Port for connecting to a local computer, to carry user serial data and/or control and monitoring data for the unit
- TCP/IP Protocol layers and infrastructure on Ethernet

It can also:

- Be compatible with RTA DIDO units (Dial-in/Dial-out)
- Switch user data to and from the two wire line Modems and the Ethernet Port, based on IP addresses and TCP ports
- Have the operational settings of the two wire Modems, Ethernet Port etc. configured by the user via SCATS®
- Allow a user to set the initial configuration of the unit, and/or allow local upgrading of a unit's firmware via an RS232 Local Maintenance Port
- Be powered by 240V AC 50Hz
- Be fitted into a 19-inch 1 Rack Unit sub-rack or enclosure, capable of being fitted into a standard 19-inch equipment rack.
- There is an option to have eight RS232 serial Data Ports, which can carry user serial data to and from any connected equipment and allow the user to: switch data to and from the RS232 Serial Data Ports and the Ethernet Port, based on IP addresses and TCP ports
- Switch data to and from the RS232 Serial Data Ports and the two wire line modems, based on IP addresses and TCP ports.
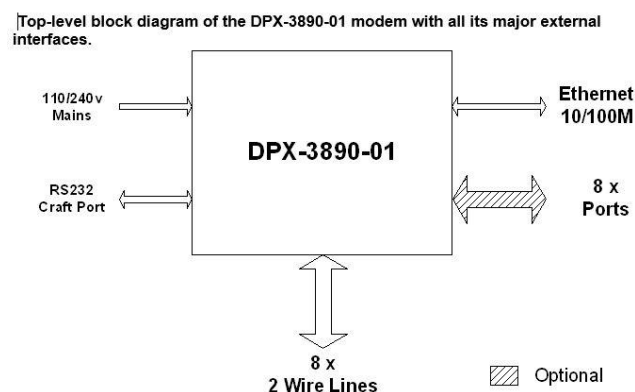

Figure 4: DPX-3890-01 external interfaces

Disclaimer: *SCATS® (Sydney Coordinated Adaptive Traffic System) is a registered trademark of the RMS (Roads and Maritime Services)*

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