

# DPX-400-3890 & DPX-400-102

DPX-400 SCATS® Shutter Sign Control Solutions



*Draft - Strictly "Commercial in Confidence"*

*The specifications in this document may change without notification*

**July 2016**

DPX-400-3890 uses SCATS® communications protocol to communicate with remote devices without the requirement for a traffic signal controller. Connecting via Ethernet to a SCATS® regional computer, it can support up to eight remote sites simultaneously communicating via partially secured proprietary SMS messaging protocols. IP over 3/4G may be supported in future releases.

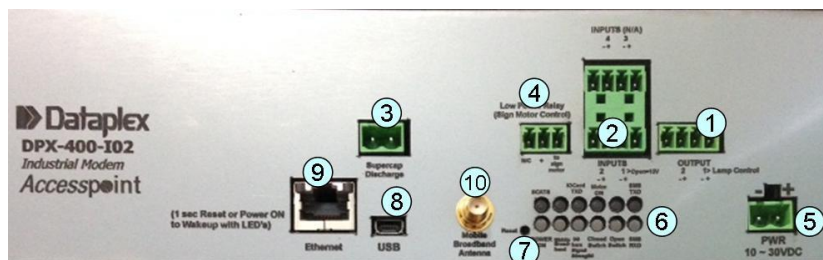
Remote applications can include shuttered signs or possibly Advanced Warning road signs etc. e.g. solar/battery powered signs that require relays, Opto-Isolated I/O to monitor & switch sign operation based on messages from/to SCATS®.

The Remote (IO2) device version monitors input voltage or other battery or movement condition indicators. It is designed to contact the central site if intervention is required and to advise current sign status – in much the same way as a DIDO (Dial In/Dial Out) device does but using SMS message exchanges

**DPX-400-3890 SCATS® Central Modem Server interface via 3.5/4G/SMS**

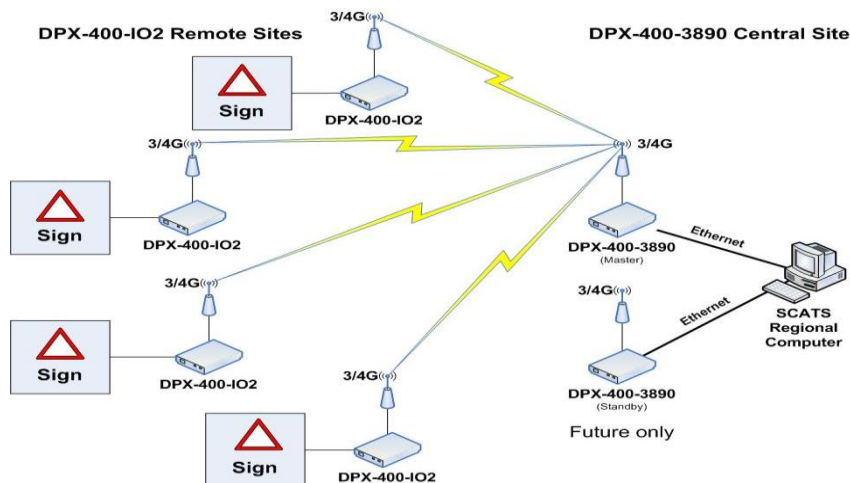
Allows DPX-400-IO2 to be controlled directly via SCATS® XSF functions – reports remote battery status, controls signs Open/Close, using existing sign hardware – up to 4 signs can be supported at the same time per unit. Backup option for redundancy of region server and wireless interface. USB serial log for diagnostic assistance.

**DPX-400-IO2 Remote Shutter Sign Interface**



1	I/O Output Connector
2	I/O Input Connector
3	Super Capacitor discharge
4	Low Power Relay
5	Power Input
6	LED Indicators
7	Reset Button
8	USB log
9	Ethernet
10	3G Antenna

- Supercapacitor UPS function for 'last gasp' SMS message should solar power battery drop too low.
- Thresholds reported directly to **SCATS®**
- Multiple Systems can be incorporated into an incident plan.
- 8-30VDC power input (low average power consumption ~50mA @12VDC) suitable for solar applications
- One Additional output to drive flashing lights.
- One additional input available to monitor device cabinet opening



## DPX-400-3890 & DPX-400-IO2 Technical Specifications

### ADDITIONAL OPTIONS (Layout fitting to development finalisation)

Dual 20A 12VDC relay controller for direct driving of sign motor optional current sense functions to monitor LED flashers or motor drive current.

Up to 12 isolated Digital inputs up to 8 isolated Digital Outputs

### DPX400 MOBILE BROAD-BAND and TSC Serial Interface Features

Based on Telit Module HE910-DG

Product	Operating Bands 3G	Frequency Bands [MHz]
HE910-DG	B5, B8, B2, B1, B4	800/850, 900, AWS1700, 1900, 2100

### ANTENNA CONNECTORS

- 1x SMA connectors for 3G/4G
- 1x Reverse SMA connectors for Bluetooth
- SIM Security Management (PIN configuration, enable and disable)

## ADMIN & CONFIGURATION

- Web-based User Interface for device status and configuration
- Configuration file backup and restore for quick device configuration
- SMS messaging (Send/Receive) of simple diagnostic
- Support for Ping , ICMP Ping
- Diagnostic serial USB Log
- NTP Server Support for network time sync of device's system clock
- Diagnostic option and Reset via SMS command option
- Multiple firmware image storage on device and dynamic install
- Triggered firmware upgrade via USB

## RESET BUTTON

- Reset button (recessed, requiring pen/paperclip) with three functions: Power LED wakeup, Reset/re-boot and reset unit to factory defaults

## TEMPERATURE

- Operating Temperature: -40°C to +70°C
- Storage Temperature: -40°C to +70°C

## POWER SUPPLY

- Power input and I/O via 2 way Molex mini-fit connector
- DPX400 DC Power (8 - 30V DC) , idle 100mA @12VDC
- System total power usage 8W

## DIMENSIONS

- Device dimensions (excluding external antenna): 236 x 125x 85 mm

## MOUNTING OPTIONS

- DIN Rail mount support optional

## CERTIFICATIONS

- RCM (Australia) \* *Pending*

**END**