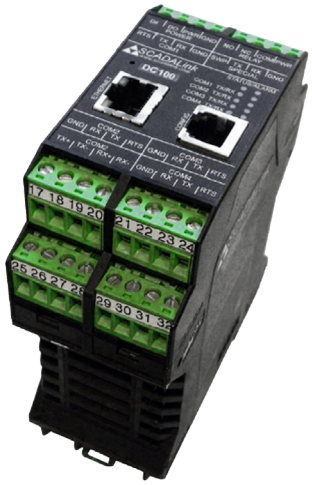
BENTEK SYSTEMS
SCADA & Telemetry Solutions

SCADALink DC100
Data Concentrator



OVERVIEW

The SCADALink DC100 Data Concentrator is a powerful and easy to configure device that can be used for data concentration, I/O point-to-multipoint telemetry over radio systems such as SMX-900 or a combination of both data concentration and I/O telemetry.

It's I/O bus interface enables connection of up to 8 SCADALink I/O modules and with built-in serial and Ethernet ports, it can act as a sub-master to a SCADA Host, collecting data from remote sites in a hardwired system or PLC systems that cannot poll.

The SCADALink DC100 Data Concentrator is a member of the SCADACON family of products consisting of a flexible and expanding range of controllers, communications and I/O modules. The DC100 interfaces to all SMX-900 family products including SMX-900 Spread Spectrum Radio as well as I/O modules.

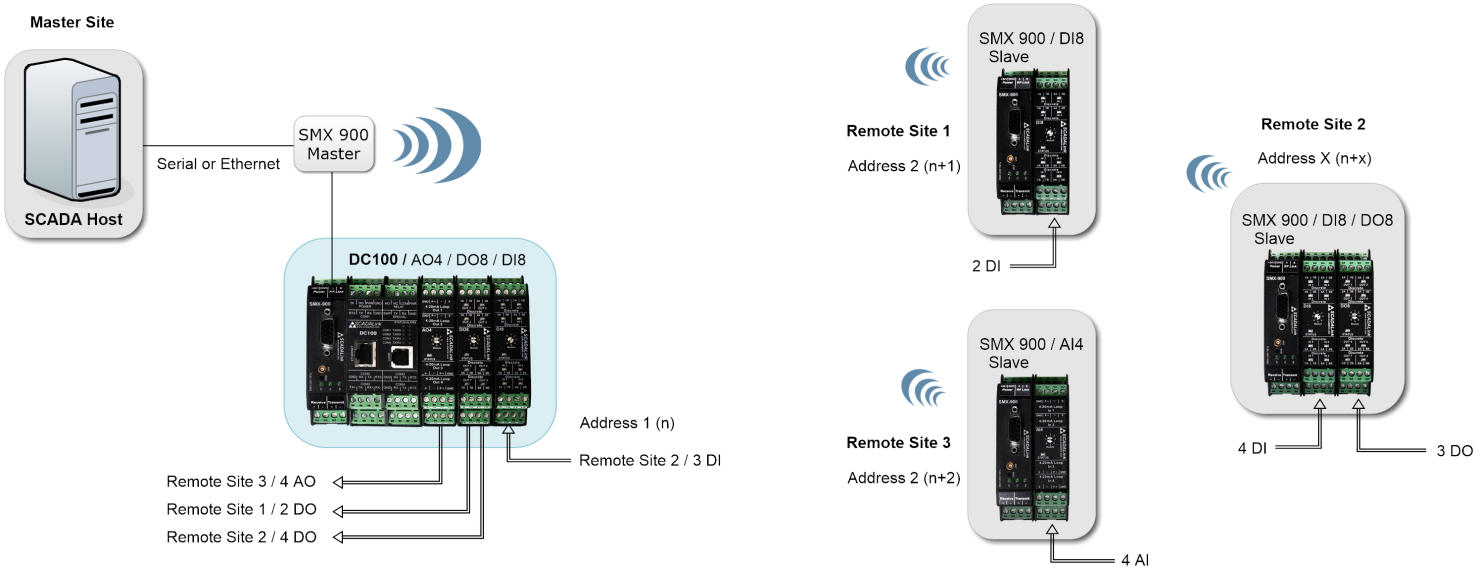
FEATURES

- 5 Serial Ports:
  - COM0 - Programming Port (RS232)
  - COM 1 - Host Port (RS232)
  - COM 2 - Modbus Polling Port (Muxed RS232 & RS485)
  - COM 3 - Modbus Slave (RS232)
  - COM 4 - Not used
- 100 Base-T Ethernet Port (Auto Detect)
- TCP, UDP, Modbus TCP
- Interface to SMX family of products: SMX- 900 Radio and I/O Expansion Modules: AI4, A04, DI8, DO8, A8D4
- Wide Input Voltage Input (10 - 30VDC)
- Industrial Temp (-40 Deg. C to 70 Deg. C)
- CSA Class I, Div 2

APPLICATIONS

- Point- Multipoint I/O Telemetry (with SMX-900 Wireless I/O)
- Point- Multipoint I/O Telemetry and SCADA Interface (with SMX-900 Wireless I/O)
- Data Concentration with PLC / RTU / DCS (with SMX-900 Wireless I/O)
- Modbus to 4-20mA
- Data Format Conversion

SYSTEM DIAGRAM



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SPECIFICATIONS

General

Power Requirements	10-30Vdc; Operating Current:50 mA@12V or 25 mA@24VDC.Rev. Polarity protected Current for Connected Loads is additional to Operating Current
Relay Bus PWR OP	RELAY|PWR to POWER|GND: Sourced Vin - 0.5Vdc / 250mA max
Battery Backup	For RAM data and Realtime clock retention
Physical Size	4.5'' x 1.8'' x 3.9'' (114mm x 45mm x99mm)
Environmental	Operating Temperature: -45 Deg.C to 70 Deg. C
Mounting	35mm DIN Railmount
Status LEDs	Status, Alarm, TX/RX for COM1, COM2, COM3, COM4
Terminal Block (TB)	4 Pin Removable Screw Terminals, Wire Gauge: 12 -24 AWG

BUILT-IN I/O

Digital Input	Dry contact switch to Gnd, ESD protected, +30Vdc clamped, 125mA resetable fuse
Digital Output	Open Drain Output, 30V C Sinking, 50mA, ESD protected, 125mA
Relay Output (Alarm)	Isolated Output 50mA (ac/dc) max @ 30Vd cmax, NO/NC Contact
Switched PWR OP	SPECIAL|SWP, Vin -0.5Vdc / 2.0Amax, reverse polarity protected

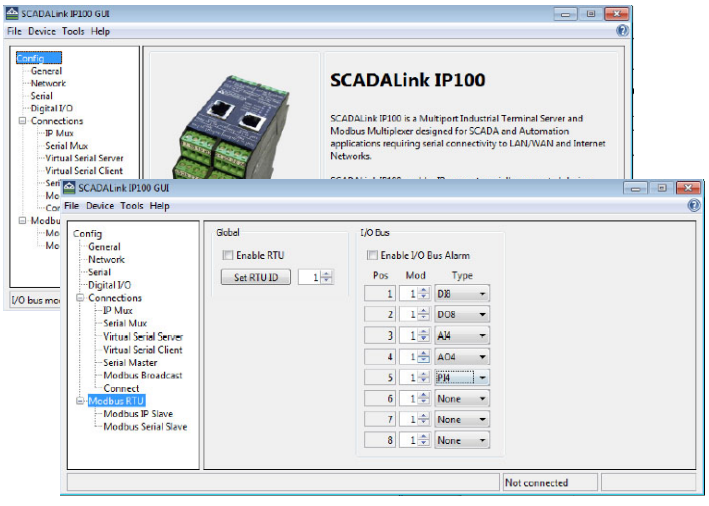
COMMUNICATIONS

Serial Ports	All Serial Ports: Async, Data bits: 7/8, Parity: 0dd/Even/No, Stop bits:1/2,Flow Control: RTS/RTS&CTS/None COM 0: RS-232, Configuration Port, 9600 Baud, RJ-11 COM 1: RS-232, Host Port, TX, RX, RTS, GND, 4 Pin Terminal Block COM 2: Simultaneous RS-232 and RS-485 Master Port, Up to 115KBaud RS-232: TX, RX, RTS, GND, 4 Pin Terminal Block RS-485: TX+, TX-, RX+, RX-, 4 Pin Terminal Block COM 3: RS-232, MB Slave Port, TX, RX, RTS, GND, Up to 115KBaud, 4 Pin Terminal Block COM 4: Unused
Ethernet Port	ETH0: 10/100Base-T Ethernet Port, RJ-45 with Status Indicators

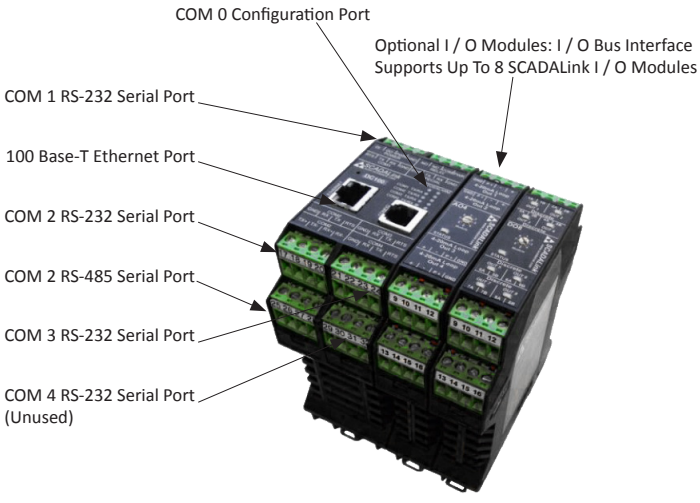
AGENCY APPROVALS

CSA	Class I Div 2, Group C, D, T3C @ Ta = -40 to 70 Deg. C

SIMPLE GUI CONFIGURATION



COMMUNICATION INTRFACE



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