



STS-BL2000 Cabinet Processor



General Description

The SmarTek Systems, Inc. STS-BL2000 is a low cost and rugged programmable interface used as a custom interface between various remote sensors (loop detectors, traffic, weather, temperature, etc.) and a standardized Remote Processing Unit (RPU) or for use as a stand alone cabinet processor. By using the STS-BL2000 to poll for and/or service periodic sensor measurement messages and then communicating with the cabinet RPU, software and processing functions in the RPU can be kept generic (traffic flow, weather information, etc.) independent of sensor type, model, or brand. The STS-BL2000 requires little power and has a very small foot print. The STS-BL2000 may be used as a flexible custom interface for loop detectors and other devices without a serial data stream. All components are on a compact board for easy integration and roadside installation. The STS-BL2000 provides cost effective data collection, cabinet processing and data archiving without having to utilize the full power of a T-Box at sites where image capture is not an option.

Physical

Size.....4.9 in W x 5.6 in D x 1.1 in H
 Operating Temperature.....-40 deg C to 70 deg C
 Humidity.....5-95%, non-condensing
 Shelf mount, high impact black plastic enclosure

Memory

SRAM.....128 K Bytes
 Flash.....256 K Bytes

Signal Interfaces

Serial Ports 3 total:
 1 Aux.....Rx, Tx, Gnd
 1 Sys.....Rx, Tx, Gnd, DCD, DTR, DSR, RTS, and CTS or 2 Rx, Tx, Gnd
 7 Dual-Purpose Analog or Digital Inputs at 12 kW, 10-bit resolution, 0-48 V DC
 1 Relay Output SPDT, 1 A @ 30 V DC, 0.3 A @ 120 V AC
 10 Digital: sink 200 mA, 40 V DC max

Display

None except a blinking activity LED

Power

Input Voltage9 to 40 VDC
 Required Power Less than 1.5 Watts

Clock

Battery-Backed Real Time Clock