



## ***NEW!* integrated Code Operated Switch**

### **Overview**

The new RelComm, Inc. integrated Code Operated Switch (*i-COS*) is a platform to provide service to multiple serial ports, typically under the control and direction of a single Master port, and four or more subordinate/Slave ports.

The *i-COS* is an integrated logic solution for the replacement of the current COS/4 assembly, and provides replacement for the obsolete UART components, with the additional requirement to replace all materials with lead-free RoHS compliant devices.

With the *i-COS*, the communication link can also be made by any of the subordinate devices selecting the channel while the switch is in Switch Time (unlocked mode).

The *i-COS* design is based on the COS-ASIC component, an FPGA, which is used to provide most of the required logic.

### **New Key Features**

In addition to the features carried over from the previous COS, new features provided with the *i-COS* includes:

- On-board programmable PROM to provide function updates and maintenance via Active Serial and JTAG connections;
- Integrated transceiver Loopback for faster fault isolation;
- “*Watchdog*” monitor for ASIC supervision;
- Port Display provides the operator with several visual indications of Switch operations and status, including Power Good, Hex code port selection, port Lockout and communication error conditions;
- Front panel indicators provide status of Data, Switch Time, Lockout, Control Handshake.
- Power-on initialization includes Port Selection default and
- Option for an internal modem

The standard user-selectable features remain: word length, baud rate, stop bits, DCE/DTE, Xon/Xoff mode, graphics mode, arming character, transparent mode, inactivity timeout, default power-up and lockout.

## **Full Specifications**

*Note: measurements are shown in both English & (Metric)*

<b>Interface:</b>	RS232/V.24, Full Duplex, Asynchronous and/or RS422/V.11, Full Duplex, Asynchronous
<b>External Connectors:</b>	Female DB25 (Master Port and Subordinate Ports)
<b>External Controls:</b>	MODE toggle switch; RESET push button switch
<b>Internal Controls:</b>	Many functional parameters are switch selectable, including: <b>Baud/Data Rate:</b> (2400, 4800, 9600, 19.2K, 38.4K, 57.6K, 76.8K, 115.2K Bps) <b>Word Format</b> (7 or 8 Data bits; 1 or 2 Stop bits; Odd or Even Parity, enabled or disabled) <b>Port Configuration:</b> DTE/DCE and Control Handshake configurable for each port <b>Auto Timeout:</b> (0.5 minutes, 1.5 minutes, 7.3 minutes or disabled/infinite) <b>Arming Character:</b> (switch selectable by the user)
<b>Indicators:</b>	LED's for <b>SWITCH TIME &amp; LOCK-OUT</b> ; Bi-color LED's for Master Port <b>DATA</b> and <b>CONTROL</b> status; 7-segment Port Display for <b>PORT SELECTED</b> , <b>WatchDog</b> and <b>COMMUNICATION ERRORS</b>
<b>Internal Connectors:</b>	<b>AS</b> (Active Serial) and <b>JTAG</b> (Joint Test Action Group) for programming; <b>AEX</b> : ASIC signals access (future use); <b>J6</b> - <b>J8</b> : 4-port expanders; <b>P1</b> : modem port; <b>J9</b> : modem power
<b>Port Addressing:</b>	Code in the data stream assigns/selects the port.
<b>Power:</b>	115/230 VAC (switch-selectable; fuse as specified), 50/60Hz, 11 watts
<b>Humidity:</b>	15% to 95% Non-condensing
<b>Temperature:</b>	Operating: +32°F to 122°F (0°C to 50°C) Storage: - 40°F to 158°F (-40°C to 70°C)
<b>Enclosure:</b>	a) Aluminum, NEMA Standard 19 inch rack mount b) Plastic, standalone ( <i>i</i> -COS/4 or /8 only)
<b>Size:</b>	<u>Rack mount:</u> <ul style="list-style-type: none"><li>• <i>i</i>-COS/4 or /8: 19" W x 10.75" D x 3.5" H; (48.26 cm W x 27.31 cm D x 8.89 cm H); 2-RETMA vertical rack space</li><li>• <i>i</i>-COS/12 or /16: 19" W ) x 10.75" D x 5.25" H; (48.26 cm W x 27.31 cm D x 13.34 cm H); 3-RETMA vertical rack space</li></ul> <u>Standalone:</u> 12.25" W x 11.75" D x 2.5" H; (31.115 cm W x 29.845 cm D x 6.35 cm H)
<b>Weight:</b>	<u>Rack mount:</u> 5.5 pounds (2.5 kg) <u>Standalone:</u> 4.0 pounds (1.8 kg)

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