

MODEL 2119

ASYNC3 DUPLEX 2-CHANNEL ASYNCHRONOUS WITH DISCRETES MODULE

1. FEATURES

- > Single Width AL4300 MITC Module
- > Two Independent Full Duplex RS-232, RS-422 or RS-485 Asynchronous Serial Ports
- > Eight Full Duplex TTL Discrete Bits
- > HD-15 Type Connectors
- > Selectable Baud Rate 1200 to 115.2 Kb for Each Channel
- > Programmable Channel ID Tags

2. PURPOSE

The ASYNC3 module is a full duplex asynchronous two channel AL4300 series module. It provides the user the ability to multiplex (and demultiplex) two channels of asynchronous RS-232, RS-422 or RS-485 serial data and eight TTL discrete signals.

ASYNC3

2119

3. FUNCTIONAL DESCRIPTION

The ASYNC3 module is designed to receive and transmit data simultaneously on two serial data ports at user selected baud rates from 1.2 k baud to 115k baud. Eight discrete TTL level signal paths are contained on the module. The discrete inputs are sampled once per system Sample Interval (1 ms or 10 ms). Discrete outputs are presented on TTL drivers.

The ASYNC3 module captures received serial data from each serial port along with eight digital discrete signals. The serial data is continuously captured and formatted into a packet for transport during the SI period. The state of all discrete inputs is captured at the time of the system Sample Interval (SI) and appended to the data packet generated by the module. The output of the module consists of the continuous flow of data from each serial port and the eight discrete signals, which are updated at each SI interval.

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4. SPECIFICATIONS

NUMBER OF CHANNELS

2 Serial, Independent, Full Duplex8 Discrete Bits, Full Duplex

CHANNEL ID

11 bit Programmable ValueOne Channel ID Assigned to All InputsOne Channel ID to Capture Remote Data

INPUT

OVERVOLTAGE PROTECTION:

RS-232: +/-30V RS-422 / 485: +/- 14V

8 TTL Discrete Bits

Input Shunt Resistance = $50k \Omega$ nom.

> 1.4 volts = Logic "0"

> 1.5 volts = Logic "1"

CONNECTORS

2 HD-15 female connectors (Refer to Table 1)

OUTPUT

Two Serial Ports each with selectable electrical interfaces: RS-232, RS-422 or RS-4851 Start Bit, 8 Data Bits, 1 Stop Bit, Parity (Odd, Even or None)

OUTPUT DRIVE CAPABILITY

RS-422 / RS-485:

2.0~V minimum with $120~\Omega$ load

RS-232:

Drives 3k Ω at 5 Volts

TTL 8 Discrete Bits:

TTL Signal Levels Drive 1k Ω load at V_{OH} 3.4 V min and V_{OL} 0.5 V max.

POWER REQUIREMENT

+5V @ 250 ma.

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