

MORE INFORMATION: link to schematics link to photos link to scope shots link to accessories link to quick reference guide link to RS485 wire

Model ASC24T

Rev. B1

MAY 2007

RS232<=>RS485 Automatic Converter

with Removable Terminal Strip, LED Indicators

General Description:

The ASC24T has fast automatic transmit-enable timing for easy RS232<=>RS485 conversion, in 2-wire half-duplex applications, at data rates up to 115.2Kbps. LED indicators for Power, TXD, RXD, with jumper selectable bias and termination. One-tenth unit load Sipex SP485REP Transceiver IC with high ESD tolerance. A loop-back jumper allows for easy self-testing of the unit.

Features:

Temperature Range: -40C to +85C Fast Automatic Transmit Enable LED Indicators for PWR, TXD, RXD Removable Terminal Strip for RS485 Supports all COMM specifications No Handshaking Required

Physical Properties:

3-wire interface to RJ11/12 Connector (TXD, RXD, Common), DTE/DCE Jumpers				
Removable screw terminal strip (Common, TXD/RXD-, TXD/RXD+)				
2.1mm center positive "Barrel" connector (8-15Vdc), linear regulator				
Power (Yellow), TXD-RS485 (Red), RXD-RS485 (Green)				
620 Ohm pull-up and pull-down (jumper selectable)				
120 Ohm (jumper selectable)				
Loop-back test jumper, Speed-up jumper for fast responding RS485 devices				

Specifications:

Temperature Range:	-40C to +85C (-40F to +185F) industrial operating range		
Relative Humidity:	10-90% non-condensing		
Input Voltage Range:	: 8-15Vdc (Some of our customers operate this product at up to 24Vdc regulated)		
Power:	Under 1/2 Watt (typical) + external load		
Physical Size:	PCB size: 2.50" X 2.00" X 0.9" with connectors: 2.50" X 2.25 X 0.9" (built-in #6 standoffs)		
RS485 Distance:	4000ft. (1250 meters) minimum, with 32 unit load devices		
Speed/Format:	Up to 115.2Kbps data rate, with any combination of bits (start, data, parity, stop, etc.)		
Operation:	2-wire, half-duplex, RS485 data, using twisted 24AWG wire (100-120 Ohm impedance)		

Options and Ordering Information:

	0	
ASC24T:	\$45.00ea.	(Fully tested & operational, Circuit board only, no accessories)
Enclosure:	\$8.00ea.	P/N Enclosure-S (small)
RS232 Cable:	\$7.50ea.	P/N DB9F-7 (RJ11/12 to DB9F adapter with 7ft. cable)
Power Supply:	\$8.50ea.	P/N 12VDC-SPS (12Vdc @ 0.45A Switching Power Supply)
ASC24T-B9FSPS:	\$69.00ea.	ASC24T Converter with all options (Qty. 1-9)

NOTE: Our most popular low cost unit, faster units available, not recommended for outdoor wiring.

Contact Information: (Sales, technical and applications assistance) R. E. SMITH, 4311 R. E. SMITH DRIVE, WEST CHESTER, OHIO 45069 513-874-4796 Phone, 513-874-1236 Fax., <u>www.rs485.com</u>