

SERIES 4700 INSERTION MAGNETIC STRIPE CARD READER

Model 4700 Reader Terminal

The 4700 model is an integrated magnetic stripe card reader terminal designed as a smart peripheral ready for connection to data communications equipment. It reads a nominal 2-3/8 inches of a card length on insertion or withdrawal or both, and it transforms ANSI/ISO or custom card data formats into ASCII. The 4700 comes with an EIA RS-232C port with selectable baud rate and parity. This unit monitors the status of two remote sense circuits, controls two remote device circuits and has two status LED lamps on front panel with an integral beeper/alarm. This reader is available for all ANSI/ISO track locations on cards and badges with single or dual magnetic stripes and comes in an attractive compact case for counter top or bracket mounting. The unit also features a UL-listed wall-plug power module.

Model 4750 Reader/Encoder Terminal

This unit has the features and resources of Series 4700 Terminal plus capability for both reading and encoding on a single cycle (e.g., read on insertion and encode on withdrawal on dual stripe cards and badges). Second stripe contains timing track used only for encoding. Available for all ANSI/ISO track locations, standard or custom data formats and encoding densities.

Operation

The operating mode of Series 4700/4750 Terminals is determined by configurational commands sent by host and may be changed at any time. Host commands and Terminal responses are ASCII printable characters. Terminal may be operated under direct host command or set for automatic operation. The series connects to a system as any data terminal device.

Features

- Smart peripheral for direct connection to any system, dumb terminal to mainframe
- Adds immediate magnetic stripe card read and read/encode capability
- Uses widely available standard credit-card size cards and badges with single (read only) or dual (read/encode) stripes
- Requires no hardware design; uses standard RS-232C cables and connectors
- Enables smallest user to issue proprietary cards and badges
- Monitors remote circuits; controls remote devices
- Cost effective for any system

Applications

Facility Management Systems

- Time & attendance
- Access control
- Job costing
- Material Control
- Process control

Facility Use Systems

- Clubs and resorts
- Dispensing systems
- Collection systems
- Limited use passes
- High security access

Specifications

Magnetic Stripe Card

- Encoding Type & Density F/2F;25 to 300 BPI (specify)
- Track & Magnetic Specs ANSI x4.16/ISO 3554
- Permissible Jitter $\pm 30\%$
- Card Thickness .021 to .035 in

Card Read/Encode Speed

- Read Speed 1.6 to 40 IPS

Reliability

- Head Life >750,000 Card Cycles (in/out)

Terminal Power Requirements

- Model 4700/4750 +5, ± 12 VDC (Supplied)

Environment

- Operating Temperature 0° to 55°C

Mechanical

- Dimensions 2.50"H x 6.06"W x 6.15"L
- Weight 25 oz
- Orientation Any Position
- Mounting Counter top or bracket

RS-232C Interface

Connector Pinouts (DB-25S)

- 1 Protective Ground
- 2 Transmit Data
- 3 Receive Data
- 4 Request to Send (Request To Transmit)
- 5 Clear To Send (Transmit Enable)
- 6 Data Set Ready (Input/Transmit Enable)
- 7 Signal Ground
- 11 Terminal in Service (Output/Ready for I/O)
- 20 Data Terminal Ready (Output/Pull-Up)

Communication Protocol

- Baud Rates 1200, 2400, 4800, 9600
- Parity Bit ODD, EVEN, MARK, SPACE, None
- Word Length 7-Bit or 8-Bit
- Line Termination CR or CR + LF
- Echo Host Trans ON or OFF
- Character Set 7-Bit Printable ASCII

Remote Circuits

Connector Pinouts (DB-9S)

- 1 -12 VDC @ 100 ma
- 2 0 VDC
- 3 +12 VDC @ 100 ma
- 4 +5 VDC @ 200 ma (Model 4700)
+5 VDC @ 75 ma (Model 4750)
- 5 Protective Ground
- 6 Sense Circuit #1
- 7 Sense Circuit #2
- 8 Device Circuit #2
- 9 Device Circuit # 1

Device Circuits

- Output Type NPN Transistor Open-Collector
- Output Hi Voltage +30 VDC Max
- Output Lo Voltage +0.7 VDC @ 300 ma
- Output Current ON 300 ma Max
- Output Current OFF 100 _a

Sense Circuits

- Input Impedance 4k Ohms Typ
- Input Hi Voltage (1) +3 to +30 VDC
- Input Lo Voltage (0) 0 to -30 VDC