

# **TR3 Specifications**

24<sup>th</sup> July 24, 2007

## **Display**

192 x 168 monochrome graphics Liquid Crystal Display with LED backlight.

## **Keypad**

15 key membrane keypad built into polycarbonate graphics overlay.

Audible key-beep for positive depression feedback.

4 keys used as multi-function "Soft Keys" which change function as required.

## **Communications**

Communications with a PC with either:

1. EIA RS232 or RS485 compatible interface.
  - Data format - 1 start bit, 8 data bits, no Parity, 1 Stop bit.
  - Data error checking - 16 bit CRC (Cyclic Redundancy Checking).
  - Baud Rates - 9600, 4800, 2400, 1200.
  
2. TCP/IP network connection.
  - Network Interface - RJ45 Ethernet 10Base-T or 100Base-TX (Auto-sensing).
  - Ethernet Version - 2.0/IEEE 802.3.
  - Protocols - DHCP, AUTOIP.

## **Memory**

256K bytes Battery Backed RAM.

32K bytes non volatile EEPROM.

Capable of storing 4900 transactions, 200 employee messages, 999 4 digit pin numbers and 6 digit passwords, 6144 bell times, 1228 8 digit job numbers.

## **Microprocessors**

Multi processor controlled using smart input and output modules.

128K of reprogrammable FLASH program memory.

## **Magnetic Card Reader**

Card Standard:	ISO2 ABA (American Bankers Association Standard) -Single track, track 2.
Operation Speed:	5 to 318 cm/second.
Life of Heads:	300,000 passes.
IEC Standards:	IEC 1000-4-2 ESD IEC 1000-4-3 Radiated EMC Field IEC 1000-4-4 Electrical Fast Transient Burst.

## **Fingerprint Module (Optional)**

Sensor Technology:	Capacitive.
Sensing Area:	12.8mm x 18.0mm.
Image Size(pixels):	256 x 360.
Image Resolution:	508dpi.
EER:	<0.1%.
Enrolment Time:	<1 second.
Verification Time:	<1 second.
CPU:	400MHz DSP
Memory:	1 MByte
Template Capacity:	1900 (950 users – each user has 2 templates per finger).

## **PS2 Port**

Capable of accepting full PS2 keyboard or off the shelf barcode reader (CCD or laser).

Barcodes used: 3 of 9 Barcode standard.

## **Construction**

Strong and sturdy 1.2mm powder coated sheet metal enclosure, wall mountable metal base.

## **Dimensions**

Height:	191mm
Width:	202mm
Depth:	76mm

## **Weight**

2.2Kg (optional Backup Battery and Fingerprint module not included)

## **Operating Environment**

Temperature: 0 to 50 degrees C  
Humidity: 5% to 90% non-condensing.  
Indoor use only.

## **Storage Environment**

Temperature: -20 to 70 degrees C  
Humidity: 0% to 95% non-condensing.

## **Electrical Power**

9V AC or 12V DC, 1 Amp.

## **Relay Contacts**

Two sets of normally open contacts rated at 2 amps maximum at 24Vdc maximum.  
DO NOT PUT 230Vac ONTO THESE CONTACTS.

## **Battery Backup (optional)**

3.6V nominal 2200mAh AA Nickel Metal Hydride rechargeable battery pack.  
Normal operation of approximately 8 hours (does not include fingerprint module or external keyboard/barcode scanner).