CIPHER LAB

Programmable
Data Terminal

510

- ◻ **Ideal for time & attendance, production monitoring, loyalty card applications**
- ◻ **Multiple Readers**
- ◻ **Network up to 99 units***

510

510 Programmable Data Terminal

Specifications

Electrical

Voltage:	12V +/- 5% DC
Power Consumption:	200mA maximum with LCD back light off and no external devices attached

Environmental

Temperature:	0º C~50º C (operating)
	-20º C~70º C (storage)
Humidity:	20%~90% non-condensing (operating)
	10%~95% non-condensing (storage)

Physical

Weight:	1kg maximum including all batteries
Housing:	ABS plastic
Color:	Gray
Dimensions:	260mm (L) x 124mm (W) x 98mm (H)

Indicator

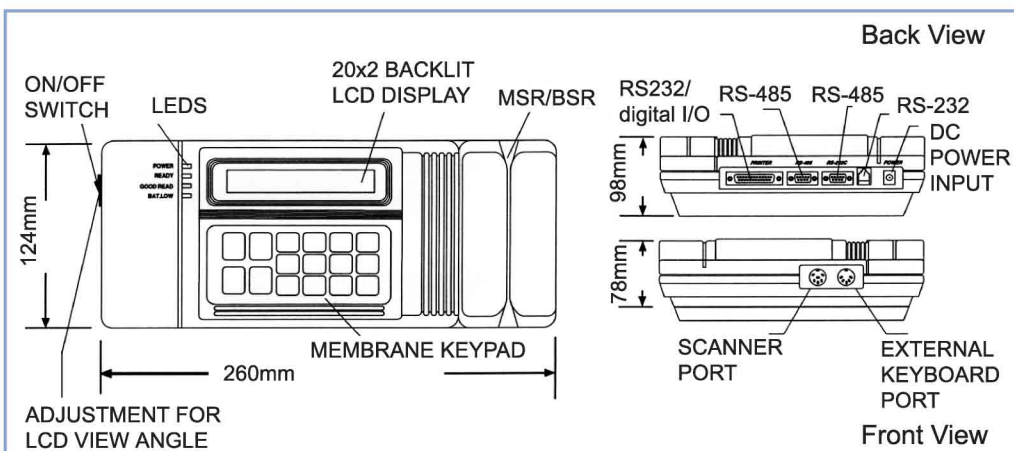|	
Buzzer:	4 selectable volumes
Power LED:	Red
Good Read LED:	Green
Battery Low LED:	Yellow
Function LEDs:	Red X 4
LCD display:	20 x 2 characters LCD display with tunable LED back-light and adjustable viewing angle

Memory

Program Memory:	128 KB flash memory
Data Memory:	128 KB to 512KB SRAM on an 128 KB base, with 3.6V NiCd rechargeable battery backup
System Clock:	16 bit CPU running at 9.8304MHz

Safety & Regulatory Approvals

FCC class-A, CE, C-tick

Input Device

Built-in Reader:	An optional Barcode Slot Reader, up to dual track Magnetic Stripe Reader or Proximity Reader can be Included
Scanner Ports: (BCR)	Can be used to attach Barcode Slot, Wand, CCD or Laser. Any TTL output device.
Bulit-in Keypad:	Membrance keyboard with 16 keys including 4 function keys
Keyboard Port: (KBD)	PC/AT compatible keyboard can be attached for data entry or any keyboard wedge interface device
Symbology Supported:	Code 39/Full ASCll, Italy & French Pharma Code, Industrial 2 of 5, Interleave 2 of 5, Matrix 2 of 5, Code 93, Code 128, EAN 128, MSI, EAN 8 & 13, UPCA & E, Plessey, Codabar

Battery

Operation Battery:	8.4V, 1400mAh battery for operation backup
Operation Battery Control:	The battery voltage can be monitored. An on-board self-shutdown circuit is included to prevent over-discharge of battery
Backup Battery:	3.6V, 60mAh NiCd battery for memory and calendar backup

Calendar
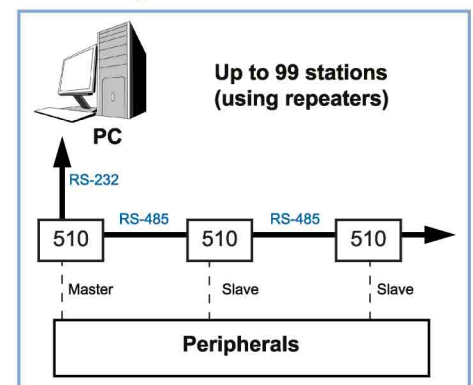
Fine-tunable calendar chip with battery backup

Digital Input/Output

Types of Input:	2 photo-isolated digital inputs can be used to monitor external devices.
Types of Output:	2 photo-isolated digital outputs can be used to control external devices such as alarm, door lock and so on.

Communication Ports

RS-485	Multi-drop communication at 76.8 kbps, up to 32 stations can be connected together without repeaters. Using repeaters, up to 99 stations.
RS-232	2 x RS-232 ports are equipped for host computer communication and/or external connection such as printer.

Dimensions & Configuration

ON/OFF SWITCH
LEDS
20x2 BACKLIT LCD DISPLAY
MSR/BSR
POWER READY GOOD READ BAT.LOW
124mm
260mm
MEMBRANE KEYPAD
ADJUSTMENT FOR LCD VIEW ANGLE

Back View
RS232/ digital I/O
RS-485
RS-485
RS-232
DC POWER INPUT
98mm
78mm
SCANNER PORT
EXTERNAL KEYBOARD PORT
Front View

Networking Architecture

Up to 99 stations (using repeaters)
PC
RS-232
RS-485
RS-485
510 Master
510 Slave
510 Slave
Peripherals