DEVAR Inc.

PAPERLESS RECORDER MODEL 8100 SMARTCHART

- * 0.1% ELECTRONIC RECORDER
- * HIGH LOW ALARMS
- * PORTABLE OR PANEL MOUNT
- * 8-DIGIT TOTALIZATION
- * 32,000 READINGS PER CHANNEL
- * BATTERY OR AC OPERATION
- * VARIABLE RECORDING INTERVAL (0.25 sec. to 1 hr.)
- * 24 VDC POWER SUPPLY FOR EXTERNAL TRANSMITTERS



- * 8 CHANNELS OF ISOLATED INPUT
- * PORTABLE MEMORY CARD

GENERAL DESCRIPTION

The Model 8100 SmartChart Paperless Recorder provides continuous monitoring on 8 isolated input channels for up to 3.5 years. Data on voltage, current, temperature, pH, level, and frequency can be monitored and where applicable totalized and displayed in real time on the SmartChart's LCD graphic screen.

Data is displayed and recorded in engineering units that are programmed via the function keypad. (Typical units are RPM, pH, PSI, °F, etc.) A dot matrix screen displays your data in graphical (bar or line) as well as digital format. As the screen is filled, data is recorded internally on 64K of internal memory.

Data can be transferred at any time to a removable and reusable memory card. The memory card provides permanent storage or it can be downloaded to your PC for analysis, using popular spreadsheet software, or for hard copy printout.

Past data can be reviewed at any time while recording, by simply scrolling back to the point you wish to view. Any two input channels can be displayed simultaneously on the screen providing more versatile monitoring.

In the laboratory or in the field, pH and ORP electrodes can be connected directly to the recorder. These measurements are useful in food, chemical and pharmaceutical processing and also in water and wastewater monitoring applications. Manual or automatic temperature compensation may be selected.

Thermocouples and RTDs can be connected directly to the SmartChart for temperature measurement applications. The recorder can also be used in power applications such as AC voltage or AC current measurements (up to 500 amps with clamp-on probe) or in level measurement applications such as with tanks, wells, and bins.

SPECIFICATIONS Model 8100 SmartChart

GENERAL

Overall Accuracy 0.1% of span Linearity Accuracy ±0.1°C (TC & RTD inputs) Resolution 12 bit Sample Rate every 125 ms Operating Temperature Range 0 to 50°C Storage Temperature -20 to +70°C General Dimensions 6-5/16"H x 9-13/16"W x 11-1/2"D Panel Cut Out 6-1/16"H x 9-9/16"W Housing Steel, textured enamel finish, portable/panel mount Power Requirements 115 or 220 VAC, 50/60 Hz, 8.2 VA 2 channel, 15. VA, 8 channel External Battery 9 to 16 VDC Communications Port RS232

INPUT

 No. of Inputs
 1, 2, 4, 6, 8

 Input Isolation
 500 VRMS

 Standard Inputs
 4/20 mA (5 Ohms, 0.1 V drop)

 0/1 VDC, 0/5 VDC, 1/5 VDC
 0/10 VDC, mV, Thermocouple

 Strain Gage, Potentiometer, RTD

 Input Impedance
 > 15 M-Ohms

 Nonstandard Inputs
 (see options)

 Output Power
 +24 VDC @ 160 mA to power 8

 external transmitters

MEMORY

BATTERY

RAM

Main

7.5 hrs fully charged (8 channel)

Memory Card

Type Lithium
Working Voltage 3.5 VDC
Capacity 165 mAH

Battery Life 4 yrs. (128 Kbyte card)

(Replaceable w/out loss of data)

DISPLAY

CONFIGURATION

OPTIONS

-2, -4, -6, -8

-C Portable -PM Panel Mount mA, MV, TC, VDC, ADC -T mA, Resistance, RTD, SG, Pot -R AC Current Input (0 to 5 A) -141 AC Voltage Input (240 VAC) -14E AC Voltage Input (600 VAC) -14EI Frequency Input 50K Hz, max -16 Pneumatic Input (3 to 15 PSI) -18 -65P pH Input (0 to 14 pH) ORP (400 to 1000 mV) -65R -RA 19" Rack Mount Adapter Memory Card Reader -CR232 -MC512 Memory Card, 512 Kbytes Relay Output, SPDT, 3 Amps -E30 -E71 220 VAC Power AC Current Probe, 500 Amps AC -MD301 Soft-sided carrying case -CS -Model 720 Submersible Pressure Transducer

2 through 8 Channels

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706 BOSTWICK AVE. BRIDGEPORT, CT 06605-2396 TEL: 203-368-6751 FAX: 203-368-3747 1-800-566-6822 www.devarinc.com