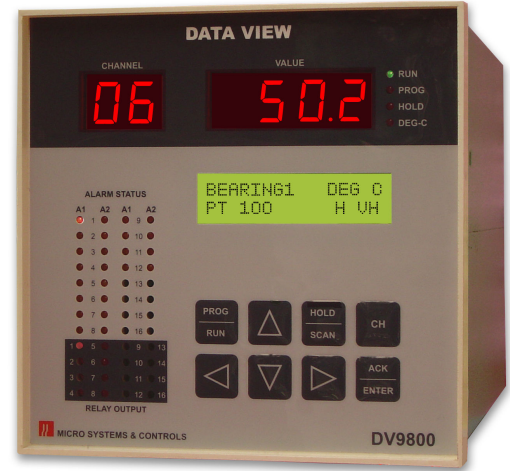


## FEATURES

- Universal input
- Advanced - dual micro controller based
- LED display and LCD display
- User programmable
  - Alarm logic
  - Relay grouping
  - Sensor break logic
  - Channel name – 8 Char
  - Alphanumeric LCD display
  - Units display
- Front panel calibration
- 20000 count optically isolated ADC
- Self diagnostics with error code
- Universal power supply or 24V DC PS



## OPTIONAL:

- Slave mode for remote display
- RS232 / RS485 communications for DAS front end applications
- MicroDAS windows software for single or multi scanner applications

DV 9800 is the latest series of advanced cost effective temperature and process scanners from Micro Systems & Controls. It incorporates advanced software features and a dual micro controller based design to provide complete user flexibility and can cater to almost all monitoring and data acquisition needs of the user. It can be user programmed to cover different application needs thus reducing time, inventory and spares cost. It accepts direct signals from thermocouples, RTDs and linear voltage and current inputs, either as fixed type or programmable universal input. Each channel is sequentially scanned and active channels are displayed. Also it has the feature of alphanumeric LCD display for user selectable multi-parameter display. Individual channels can be locked for monitoring using the HOLD key. Flexible alarm logic and grouping is provided to energize alarm relay outputs as per the process parameter values and programmed set points. Serial communication options are provided to enable the scanner to be used in DAS front-end applications. Optional windows based MicroDAS software is also available from 8 to 256 channels for monitoring and data logging using multidrop RS485 MODBUS RTU option.

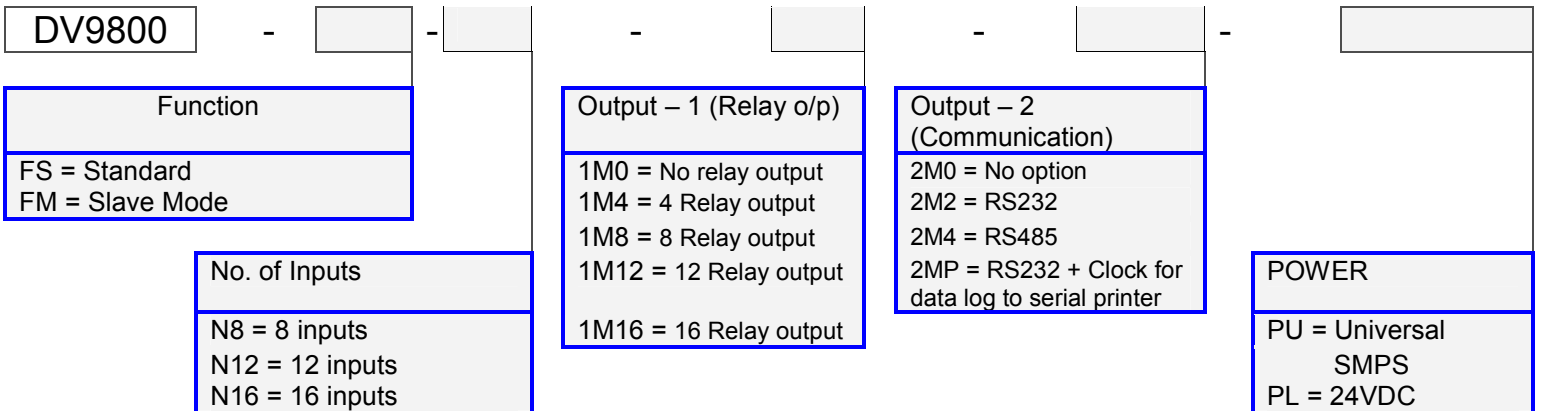
## INPUT TABLE

| INPUTS       | TYPE & RANGE  | RESOLUTION                          |
|--------------|---|-------------------------------------|
| Thermocouple | 8 types: J =0 to 700, K =0 to 1200, R= -50 to 1765, S= 0 to 1766, T= -100 to 400,E= -100 to 1000, B= 250 to 1820, N= -200 to 1300°C                       | 1 Deg                               |
| RTD          | PT100 (DIN 43760 / IEC 751) = -200 to 600, PT50 = -200 to 600, Ni100 (0.672 and 0.618) = 0 to 200, Cu53 = 0 to 150, Cu50 = 0 to 250, Cu10 = -100 to 200°C | PT100: 1 & 0.1 Deg<br>Others: 1 Deg |
| DC Volts     | 0 to 5V or 1 to 5V Range -1999 to +9999 programmable  | 1 to 0.001                          |
| mA           | 0 to 20mA or 4 to 20mA Range -1999 to +9999 using 150 ohms conditioning resistance  | 1 to 0.001                          |

**SPECIFICATIONS:**

|                      |  |
|----------------------|--|
| Inputs               | Universal input, Refer input Table   |
| No of channels       | 8, 12 or 16 channels   |
| Input Connections    | Rugged screw terminals suitable for 0.2 to 2.5 mm sq mm cable  |
| Input Impedance      | > 1 Meg Ohm  |
| Output               | Up to 16 Relays  |
| Relay Grouping       | Programmable – Any alarm can be assigned to any relay.   |
| Relay Rating         | 1 C/O, 5 Amps / 230VAC resistive max.  |
| Alarm set points     | Two individual alarm settings per channel  |
| Display              | <ul style="list-style-type: none"> <li>LED Display: 12.7 mm, 7segment Red Led - 2 digits for channel value, 4 digits for process value; Individual Alarm &amp; Trip LEDs for each channel; Prog, Run, Hold, Error and Relay status LEDs</li> <li>LCD Display: 2 lines X 16 characters backlit LCD for user selectable multi-parameter display</li> </ul> |
| Alarm LEDs           | Individual A1 & A2 LEDs per channel, Latching or non Latching  |
| ADC                  | 20,000 count optically isolated ADC with dedicated microcontroller   |
| Compensations        | Automatic - Cold junction for TC, Wire resistance for RTDs   |
| Accuracy             | +/- 0.1 % FS, +/- 1 count  |
| Resolution           | Programmable as per Input table.   |
| Noise Rejection      | Common mode 120 dB or better, Series mode 60dB or better.  |
| Alarm Logic          | Programmable High, Low, Very High, Very Low Latching & Non Latching  |
| Display Scan         | 1 to 99 seconds programmable, Auto and Manual with HOLD  |
| Internal Scan Rate   | 10 channels per second   |
| Real Time Clock      | Optional real time clock calendar for data printout with time stamp.   |
| Communications       | Optional RS232 or RS485 for printer log and MODBUS RTU   |
| Software             | Optional Windows MicroDAS data acquisition package for single or multi scanner   |
| Battery Backup       | Non-volatile EEPROM, Battery not required.   |
| Power Supply         | Universal 90-260VAC / 110-250VDC, 10VA max or 24V DC +/- 10%, 0.5A max (as per ordering code)  |
| Sensor break / Error | Programmable Enable or Disable Alarm with 'open' / 'short' indication.   |
| Protection           | Password protection for configuration, Watchdog for system monitoring.   |
| Environment          | Temp: -10 to + 60 Deg C Max. RH: Up to 95% non condensing  |
| Enclosure            | Robust metallic powder coated enclosure with plastic bezel.  |
| Protection Class     | IP65 Front panel   |
| Mounting             | Flush on panel with screw type clamps 2 Nos  |
| Dimensions           | External: 144(W) X 144 (H) X 250 (D) mm.   |
| Panel Cutout         | 138 X 138 mm.  |
| Gross Weight         | 2.5 Kg max.  |
| Accessories          | 1) Two nos Screw clamps for mounting. 2) 150 Ohms conditioning resistances for 4-20mA input.   |

**ORDERING CODE:**



Note: Slave Mode has no external inputs and has fixed RS485 port.

**SAMPLE ORDER CODE**

**DV9800 - FS - N8 - 1M4 - 2M4 - PU**

Standard version, 8 Inputs, 4 Relay Outputs, RS485 option, Universal SMPS