



**DC Process analog unit
with blazing bright,
large, color-changing
display... optional tare
function**



The Veeder-Root brand S628 DC Process is a member of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. Its large LED display features the ability to change color based on process status such as exceeding an alarm value. Therefore, when monitoring process variables in applications using analog signals, the S628 provides operators with an instant visual alert to changes in the application's status.

- **AWESOME** 0.71" high digit LED display (27% larger than other 1/8 DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- Field configurable alarm outputs
- Max. and min. value capture
- Plug in option cards include: 2nd relay, digital input, linear output, RS-485 communication
- Transmitter power simplifies wiring
- mA inputs to 50mA, DCV inputs to ± 10 Volts and ± 100 mV
- Tare function
- Standard outputs: 2 NPN transistors & 1 relay (optional 2nd relay)
- 100 ms sample time with 0.03% accuracy
- CE approved

Process inputs are easily scaled into engineering units by programming two input values and their corresponding display values through the front panel. For nonlinear applications, up to 10 scale points can be entered. A teach function, which automatically inputs the current sensor reading as a scale point, further simplifies setup. The two alarms can be setup for high or low operation, reverse or direct acting, and can be latched. An integrating totalizer can be used to accumulate flow or other values where tracking a total may be useful.

SPECIFICATIONS

Process Input: To 50 mA, ± 10 Volts DC, ± 100 mV

Accuracy: $\pm 0.01\%$ of span

Sample Rate: 100 ms

Resolution: 14 bits

Sensor Break: Detected within 2 seconds

Control Inputs: Sourcing, Edge Sensitive

Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0

Impedance: 4.7 K Ω to + voltage - Sourcing

Function: Programmable

Outputs: Solid State: NPN open collector, 30 VDC max., 100 mA max.

Relay: SPDT, 5A resistive@ 110 VAC

Latency: 75 μ seconds, plus 8 ms for relay pull-in

Linear Outputs: 0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V

Accuracy: $\pm 0.25\%$ (mA at 250 Ω , V at 2k Ω); degrades linearly to $\pm 0.5\%$

Resolution: 8 bits in 250ms (10 bits in 1s typ.)

Update: Approximately 4/s

Load Impedance: mA ranges: 500 Ω max.; V ranges: 500 Ω min.

Communication: RS-485; Serial asynchronous, UART to UART;
Open ASCII: One start bit, even parity, seven data bits, one stop bit;
Baud Rate selectable from 9600, 4800, 2400, or 1200
Maximum Zones: 99

Supply Voltage: 90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC; 4 Watts

Accessory Power Supply: Voltage: 20-28 VDC, 24 VDC nominal;
Min. Impedance: 910 Ω (22 mA @ 20 VDC)

Display: Red/Green, 7 segment LED

Primary display: 5 digits, 0.71" (18mm) height

Secondary display: single digit, 0.3" (7mm) height

Annunciators: Output 1 & Output 2 status

Dimensions: 48mm x 96mm, 110mm deep

Mounting: Panel mount (mounting bracket supplied), 45mm x 92mm cutout

Connections: Screw type terminals - combination head

Front Panel Rating: NEMA 4X/IEC IP65

Case Material: GE Lexan 940

Weight: 0.56 lbs.

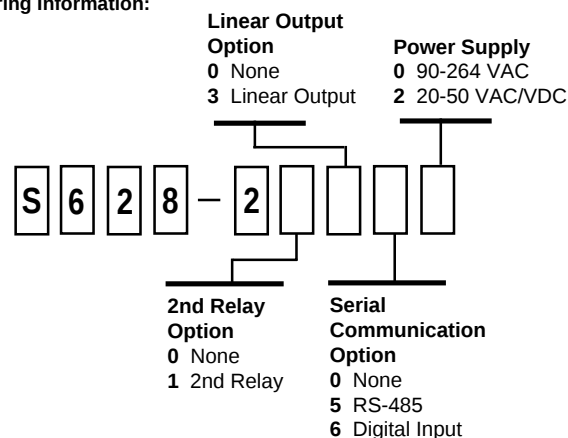
Operating Temp.: 0° to 55° Celsius, 32° to 131° Fahrenheit

Storage Temp.: -20° to 80° Celsius, -4° to 176° Fahrenheit

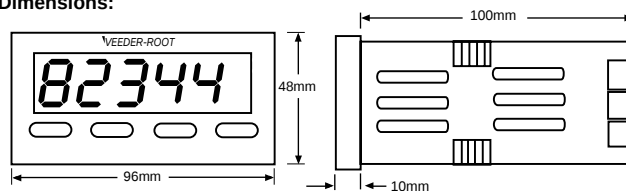
Relative Humidity: 20% to 95% non-condensing

Approvals: CE

Ordering Information:



Dimensions:



Panel Cutout: 45mm x 92mm (1.77" x 3.62")