Specifications

Signal Input

Type: Software selectable for passive or active sensors & terminal block jumper for active sensors.

AC Input (sine wave):
Input Impedance = 2K ohms
Sensitivity @ 1KHz = 200 mVrms
Max. Voltage Input = 25 Vrms
CMRR = > 40 db @ 1KHz, ref. to input threshold.

Pulse Input (TTL compatible):
Input Impedance = 2K ohms
Min. Pulse Width = 10 □s
Logic 0 = V in < .5V
Logic 1 = V in > 1.5V
(+ 12 VDC @ 50mA supplied for powered sensors)

Frequency Range: Upper limit 30 KHz, Lower limit software selectable 10 Hz to .0625 Hz.

Power Supply

120 Vac ±10%, 50-60 Hz
24 Vdc (23-30 V), std. 750 ohm analog load or (20-30 V) with 600 ohm analog load.
15 watts maximum power.

Outputs

Meter Output 0 to 1.0mA ±.5% of full scale. True current 15 K ohm maximum. Full scale selectable from .1 Hz to 30 KHz.
Analog filter (approx. 2 sec.) switch selectable.

Analog Output: Selectable to 0 to 20 mA or 4 to 20 mA, ±.5% of full scale. True current 750 ohm maximum.
Full scale and zero scale selectable .1Hz to 30 KHz.
Analog filter (approx. 2 sec.) switch selectable.

Relay Outputs: Four SPDT relays, 6A @ 28Vdc or 240Vac, 170 W or 1800 VA. Selective relay logic: Energize or de-energize above or below setpoint. Auto-reset at setpoint with programmable frequency hysteresis 00.0% to 99.9% or with time delay hysteresis selectable 000 to 999 data acquisitions. Latching relay at setpoint with remote reset.

Response: 50 milisec. updates above 100 Hz. See manual for updates between 20 and 100 Hz, one cycle below 20 Hz.

Accuracy: ±0.05% for relay setpoints in operations over temperature range, ±0.5% of full scale for meter and analog outputs.

Environmental

Temperature: -10 to 55 °C operating.
-40 to 80 °C storage.

Vibration: Designed to meet MIL-810C, Method 514.2, Procedure VIII, Figure 514.2-6. Curve V (1.5 g's 10-200 Hz).

Shock: Designed to meet MIL-810C, Method 516.2, Procedure I, Figure 516.2-2 for ground equipment (30 g's half sine).

Enclosure: Enclosed terminals, same mounting holes as the 300 Tach with enclosure 50% wider. NEMA 4X & explosion proof enclosures optional.

Humidity: 90% relative and non-condensing.

Constant Storage:
Retained in EAROM and may be altered 1000 or more times.

Electrical References: Circuit common is isolated from AC power, AC ground and case. DC power, analog output and meter output are referenced to circuit common. Passive inputs are balanced. Active sensor inputs are referenced to circuit common.

Electrical Connections

TB1
-1 K1 NC
-2 K1 COM
-3 K1 NO
-4 K2 NC
-5 K2 COM
-6 K2 NO
-7 K3 NC
-8 K3 COM
-9 K3 NO
-10 K4 NC
-11 K4 COM
-12 K4 NO

Relays Shown De-Energized

Contact Rating:
6A Max. at 28Vdc
OR
6A Max. at 240Vac

-13 AC Power
-14 AC Power
-15 Earth

TB2
-1 + 24 Vdc In
-2 DC Common
-3 Calibrate (when tied to +12V)
-4 DC Common
-5 + 12Vdc Out (50mA max.)
-6 Relay reset (when tied to + 12V)
-7 Signal +
-8 Signal -
-9 Shield
-10 Meter +
-11 Analog Common
-12 Analog +