

Specifications

Signal Input

Type: Active or passive pickup determined by software settings (jumper required for active pickups)

AC Input (sine wave):

Input Impedance = 2000 ohms
Sensitivity @ 1KHz = 250 mVrms
Max. Voltage Input = 25 Vrms

Pulse Input (TTL compatible):

Input Impedance = 2000 ohms
Min. Pulse Width = 10 μ 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 from .0625 Hz to 10 Hz.

Input Power *

24 Vdc (24-30 V), std. 600 ohm analog load. 7 watts max. power.

* A switching power supply, P/N T77410 - 100/240 AC, is available. It converts 100 Vac thru 240 Vac, 50/60 Hz input power to 24 Vdc output.

Output

Relay Output: One SPDT relay, rated 6 amps @ 28 Vdc or 300 Vac, 170 W or 1800 VA. Frequency hysteresis selectable from 0.0% to 99.9%, or

latching with remote reset. Relay logic and type selectable. Time hysteresis selectable 000 to 999 data acquisitions or latching with delay of 000 to 999 data acquisitions.

Analog Output: Selectable from 0 to 20 mA or 4 to 20 mA \pm 5%. True current, 600 ohm maximum loop resistance. Full scale and zero scale selectable from 0 Hz to 30 kHz.

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

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

Environmental

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

Vibration: Tested to IEC 68-2-6, 10-150 Hz, 2g.

Shock: Tested to IEC 68-2-27, 50g half sine.

Enclosure: IP 40

Humidity: Tested to IEC 654-1, IEC 68-2-3 90% Humidity.

Constant Storage: Retained in EAROM and may be altered 1,000,000 times.

Electrical References: DC power is referenced to digital common. Analog output is referred to analog output common. Passive inputs are balanced. Active pickup inputs are referenced to circuit common. Form C relay contacts are isolated.

Electromagnetic Compatibility: The STACKTACH shall function to the requirements of the European Council Directive 89/336/EEC, the EMC Directive.

IMMUNITY per EN 50082-2 1995:

EN61000-4-2, 1995: ESD: \pm 8kV Air, \pm 4kV contact discharge.

EN61000-4-3, 1997: Radiated R-F: 10 V/m, 80 to 1000 MHz.

ENV50204, 1995: Radiated pulsed: 10 V/m, 900 MHz.

EN61000-4-4, 1994: EFT/B: 2 kV ENV50141: Conducted noise: 10V, 150 KHz to 80 MHz.

EN61000-4-8, 1994: Power frequency, magnetic field: 1 A/m.

EMISSION per EN50081-2 1995: EN55011, 1998: Class B radiated emissions.

Terminal Block #	Terminal	Description
TB1	1	Input Signal +
TB1	2	Input Signal -
TB1	3	Shield
TB1	4	+12 Vdc Output (50 mA max.)
TB2	5	0-20/4-20 mA Analog Output (+)
TB2	6	0-20/4-20 mA Analog Output (-)
TB2	7	Verify/Calibrate (when connected to +12 Vdc)
TB2	8	Digital Common
TB3	9	Digital Common
TB3	10	+24 Vdc Input
TB3	11	Relay Reset (when connected to Digital Common)
TB3	12	Earth
TB4	13	K1 Common
TB4	14	No Connection (not used)
TB4	15	K1 Normally Closed
TB4	16	K1 Normally Open