

Encoders

PM28S Dual Amplifier

Dual universal input amplifier . . . provides 6 types of input functions



PM28S replaces PM21, PM25 and 101UA

APPLICATION/INDUSTRY

The model PM28S provides six types of input functions in one easy-to-use, two-channel isolated product.

DESCRIPTION

As an amplifier, it accepts differential line driver, single-ended, and magnetic signals, converting them to single-ended signals for use with counters and indicators. This unit is isolated from input to output, and allows input signals to travel long distances without degradation. The isolation provides higher noise immunity for the total system.

The input termination is programmable to match most encoders, pickups and other input devices, including many low level flow meters.

The PM28S also provides a power source for encoders, pickups and other input devices. Its special MOSFET output will typically drive up to six loads.

The two channels operate independently, so any combination of inputs can be used. All field connections are made through a terminal strip which accepts number 22 through 12 AWG.

FEATURES AND BENEFITS

- Two independent channels
 Selectable inputs- differential inputs, 12V inputs, 5V inputs, TTL inputs, magnetic inputs, 50 mv inputs for low level flowmeters
- Transducer supply
- Selectable line termination
- Hysteresis on inputs
- Noise filtering
- Isolated MOSFET line driver outputs
- Selectable 115/230 VAC operation

SPECIFICATIONS

SPECIFICATIONS

Input Power: 115/230 VAC, ±10%; 50/60 Hz; 6 VA Input Transducer Power: +12 VDC ±5% @ 150 mA Isolated Output Power: +12 VDC ±5% @ 150 mA Transducer Inputs:

- 12V Inputs: Voltage Range: 12-30 VDC; High Trip Point: 9 VDC min.; Low Trip Point: 3 VDC max.
- 5V Inputs: Voltage Range: 5-12 VDC; High Trip Point: 3.5 VDC min.; Low Trip Point: 1.0 VDC max., Input Frequency: 100 kHz max.
- TTL Inputs: Voltage Range: 2.5-5 VDC; High Trip Point: 1.8 VDC min.; Low Trip Point: .8 VDC max.
- Magnetic Inputs:Voltage Range: 2-30 VPP; High Trip Point: .8 VDC min.; Low Trip Point: .2 VDC max.
- Flow Meter Inputs: Voltage Range: 50-500 mVP; High Trip Point: 50 mVDC min.; Low Trip Point: 15 mVDC max; Input Frequency: 100 kHz max.

Outputs:

- V_{ol}: 0.5 V typ. @ 70 mA sink
- V_{oH}: 11.1 V typ. @ 70 mA source

Output Resistance:15 ohm @ 10 mA typ.

- Rise Time: 40 nS max.
- Fall Time: 40 nS max.

Peak Output Current:1.5 A max.

- Output Current120 mA max. Output Frequency100 kHz max.
- Number of MAX or MAXjr loads:6 per channel

Environmental:

Operating Temperature: 32° to 122°F (0° to 50°C)

- Storage Temperature: 0° to 186°F (-18° to 85°C)
- Relative Humidity: 0% to 90% noncondensing





| Model No. | Description |
|-----------|--------------------------------|
| PM28S00 | Dual Universal Input Amplifier |

Note: For other application considerations see the Dynapar brand PM21S Differential Line Receiver and Supply in the **Digital Accessories** section.

Spec Tech Industrial 203 Vest Ave. Valley Park, MO 63088 Phone: 888 SPECTECH E-mail: sales@spectechind.com www.spectechind.com