

MODEL 300

± 3½ DIGIT HI-REL DIGITAL PANEL METER (MAIN FRAME)



FEATURES

- Main Frame for 17 Models
- 10uV Resolution
- 1000V F.S. Range
- MTBF ≥ 50,000 Hr. (Calculated)
- Field Returns ≤ 0.7%
- Optional Dummy Zero



DESCRIPTION

The 300 is the Main Frame for 17 different models containing the most popular ± 3½ Digit A-D Converter and its related hardware. An internal DC-DC Converter transforms the 5Vdc to ± 12Vdc which is available at edge connector for external use (± 5mA) Decimal Points are externally programmable. Reading Hold is available on request, Lamp Test and Display Blank is easily accomplished by grounding their terminals.

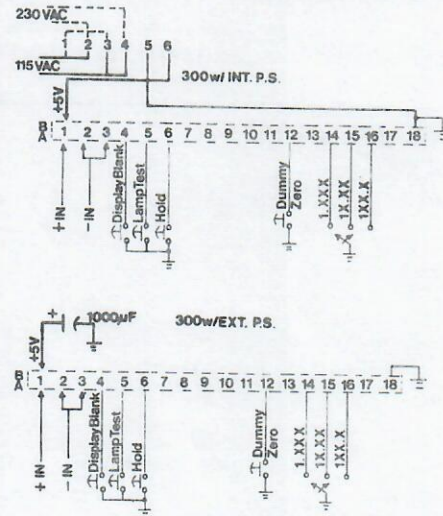
SPECIFICATIONS @ 25°C

Polarity	Fully Bipolar
Input Impedance	Greater than 1000 Meg OHMS
Bias Current	Less than 5 pA
Normal Mode Rejection	60dB @ 50/60 Hz
Zero	Automatic
Display	0.5", High LED RED
Overrange Indication	.4/second Flashing Display
Overload Protection	To 1200 Vdc/AC Any Voltage Range
Accuracy & Linearity	± 0.05% ± 1 Digit
Sample Rate	4 Per Second Nominal
Step Response	100mS From Zero to Full Scale
Temperature Coefficient	30 Parts Per Million
Full Scale Adjustment	25 Turn ± 20% Adjustment
Power Requirements	5Vdc ± 5% @ 300mA
Operating Temperature	-10°C to +60°C
Storage Temperature	-25° to +85°C

TERMINAL DESCRIPTION

1B (Top) +5Vdc Input; 18B, Digital Ground (5V Return) 1A (Bottom) + Signal Input; 2A - Signal Input (connected internally to 18B). **Do not** allow power currents to flow on this line or **Offsets** (Ground Loops) **will** occur.

4A, Display Blank; 5A, Lamp Test; 6A, Display hold (optional); 13A, -12Vdc out 5mA max.; 14A, 1XX.X D.P.; 15A, 1X.XX D.P.; 16A, 1.XXX D.P. (connect to 18B to light up); 17A, +12Vdc out 5mA max.; 18A, Sign Out (Low For +, High For -). Ground 12A to activate dummy zero.



ORDERING INFORMATION

MODEL 300 X X X

INPUT RANGE SPECIFICATIONS

	F.S. Input	Resolution	Input Impedance	Accuracy
\$	* ± 20.00mV	10u Volts	1000 Megohms	± 0.1%
0	± 200mV	100u Volts	1000 Megohms	± 0.05%
1	± 2.000V	1m Volt	1000 Megohms	± 0.05%
2	± 20.00V	10m Volt	10 Megohms	± 0.05%
3	± 200.0V	100m Volt	10 Megohms	± 0.05%
4	± 1000V	1 Volt	10 Megohms	± 0.05%
5	± 200.0uA	100nA	1000 Ohms	± 0.05%
6	± 2.000mA	1uA	100 Ohms	± 0.05%
7	± 20.00mA	10uA	10 Ohms	± 0.05%
8	± 200.0mA	100uA	1 Ohm	± 0.05%
9	* ± 50mV	1 count	1000 Megohms	± 0.1%

* This range not available with built-in Power Supply, see page 45 for External P.S.

Power

- 0 ... 5Vdc Req'd
- 1 ... 115/230 Vac
- 2 ... External Open Frame
- 3 ... External Power Pack

Display

- 0 ... Standard
- 1 ... Dummy Zero

Note: 50mV range is factory scale to read 1000 counts at 50mV for standard current shunts. Other scalings available.

Note: Connectors are included with instrument.