



POWERLESS CURRENT LOOP INPUT LCD DPM
"Flat Pack" No Panel Cut Out Required
(NEMA 12 or NEMA 4)
"Naked" Panel Mount for OEMs

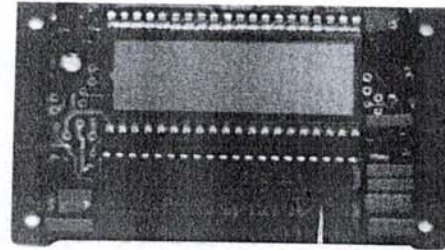
MODEL
521



FLAT PACK

Features

- Powerless (Loop Powered)
- 1-5, 4-20, and 10-50mA Ranges
- Zero and Full Scale Adjustments
- Splash Proof Case
- Low Voltage Drop
- 0.5" LCD



NAKED

DESCRIPTION: The 521 requires **no external power** for operation. It uses loop current to convert the analog signal to a clearly visible LCD readout.

In operation, transmitter loop current is terminated in a 5-Ohm (typically) Impedance with Zener Diode Protection to clamp the signal at 5VDC. The voltage developed across the zener and resistor powers the single IC's and LCD. The ZERO Potentiometer has 12 turns to allow high resolution offset of the zero of 1000 counts. The FULL SCALE Potentiometer allows 1500 counts of adjustment.

APPLICATIONS: Milliampere Current Loop Digital Indicator for pressure, velocity, temperature, tension, flow, etc. Milliammeter or Shunted Ammeter, the only restraint being that the current measured is between 1 and 50 mADC and the Compliance Voltage be above 4 Volts.

FLAT PACK style requires no panel cut out. Just drill a 10mm (3/8") Ø hole, pass the wires through, attach the provided double-sided tape (to prevent rotation), align the flat pack, tighten the nut and make connections to the wires. No connector or tools required! And no behind the panel space needed! The case is red acrylic and **NEMA 4** options include a panel gasket and the adjustment plugs are omitted to provide a water tight seal.

The **NAKED PANEL MOUNT** style is instruments on a board and mount from behind the panel. An optional bezel and filter (clear) are available to enhance your panel and give the proprietary look. The Panel Mount has a 10 pin header for flat ribbon connector.

POWER SUPPLIES: (For Transmitters) When required and ordered will be externally mounted. Two types are available, the "Open Frame" style accepts 120/240VAC and delivers 24VDC @ up to 100mADC. The "Power Pack" is a wall plug in module available only for 120VAC input and delivers 24VDC at up to 100mADC.

BACKLIGHT: A loop powered backlight is available on request. Its intensity is proportional to the current loop input (lowest at 4mA, highest at 20mA). The color is either red or green (specify) and its negative image (colored segments over black background).

SPECIFICATIONS AT 25°C

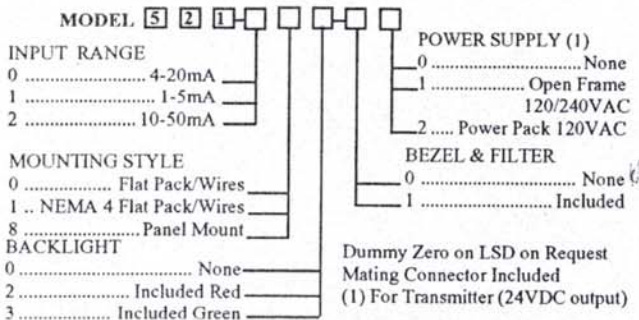
Accuracy and Linearity	±.05% ±1 Digit
Current Loop	1mADC Min. 70mADC Max.
Voltage Input (loop burden)	4VDC Min.
Protection	30VDC Max.
*Zero Adjustment	-500 to 500 Counts at 4mA
*Full Scale Adjustment	350 to 1999 Counts at 20mA
Operating Temperature	-10 to +55°C
Storage Temperature	-15 to +60°C
Temperature Coefficient	±60ppm/°C
Humidity	521 Unaffected to 90% at 33°C
Display	3½ Digit (1999). 0.5-In. (13-mm) LCD
Decimal Point	Externally Selecteable
*Other Scales on Request	

TERMINAL DESCRIPTION

- NOTE:** These differ from older models.
 As of this date (9/91) dummy zero (old) on request only.
- | | | |
|----|----------|--|
| 1 | Brown | DECIMAL POINT 1XX.X: This decimal point will illuminate when connected to pin 3/blue. |
| 2 | Gray | DECIMAL POINT IX.XX: This decimal point will illuminate when connected to pin 3/blue. |
| 3 | Blue | DECIMAL POINT ENABLE: Connect desired decimal point to this terminal. |
| 4 | Red | + INPUT: Connect the positive input of the current loop. |
| 5 | Not Used | |
| 6 | Black | - INPUT: Connect the negative input of the current loop. |
| 7 | Not Used | |
| 8 | Not Used | |
| 9 | Not Used | |
| 10 | Violet | DECIMAL POINT 1.XXX: This decimal point will illuminate when connected to pin 3/blue. |

ORDERING INFORMATION (9-91)

NOTE: As of this date, the display height has been increased from 0.35" to 0.5".



TEL (602) 748-7900
 FAX (602) 790-2808
 FSCM: 57861

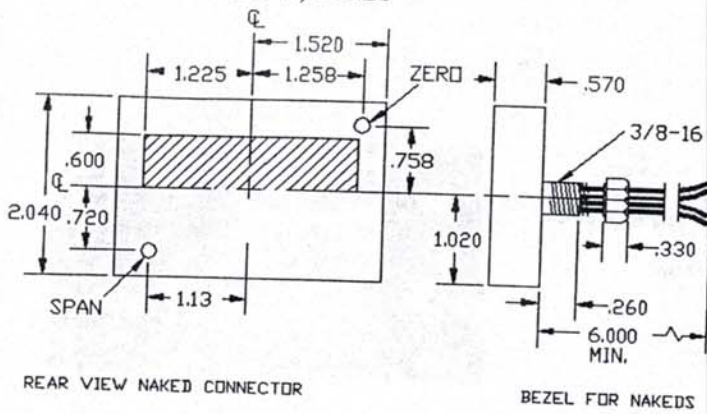
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 OTTOTEK DIV.

Made in the U.S.A.
 4016 E. Tennessee St.
 Tucson, AZ 85714

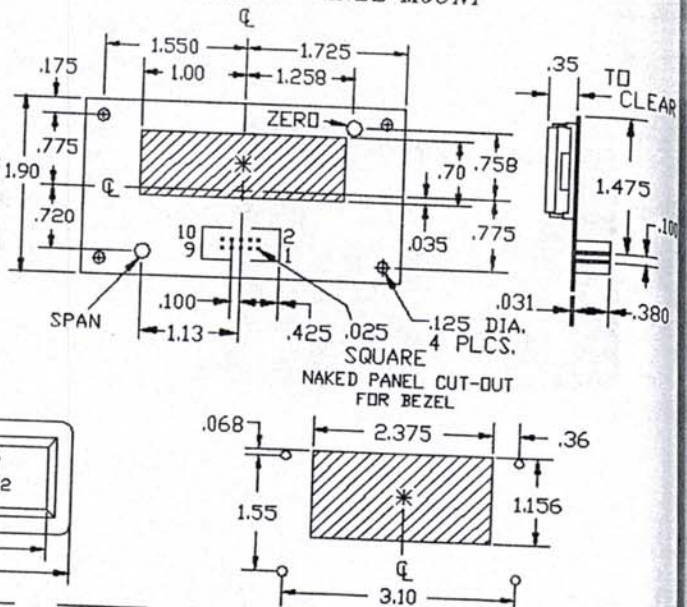


521 FLATPACK MECHANICALS & TYPICAL CONNECTIONS

FLAT PACK W/WIRES



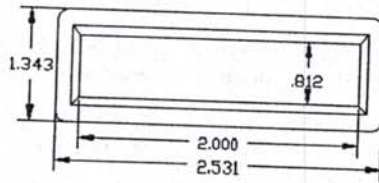
NAKED PANEL MOUNT



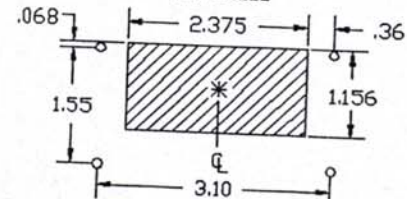
REAR VIEW NAKED CONNECTOR



BEZEL FOR NAKEDS

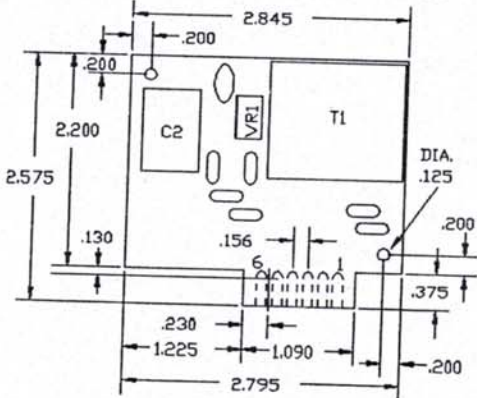


NAKED PANEL CUT-OUT FOR BEZEL

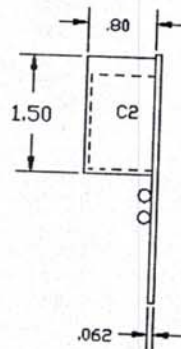


MECHANICALS FOR POWER SUPPLIES

OPEN FRAME STYLE
P/N 81-3113, 24VDC OUTPUT

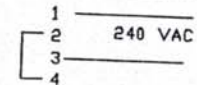
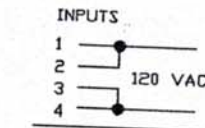


SIDE VIEW



(FOR TRANSMITTER IF REQ'D)

OPEN FRAME
POWER SUPPLY
TYPICAL CONNECTIONS

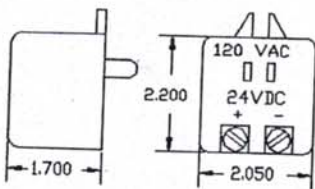


OUTPUTS
5 -GROUND
6 +VCC

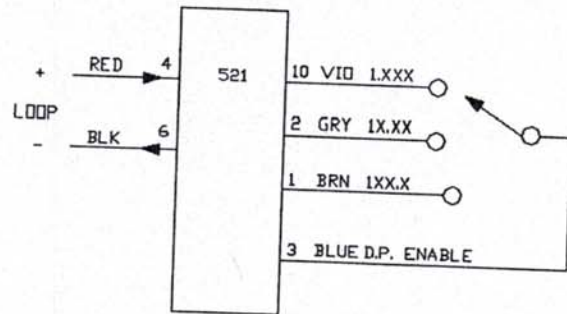
P/N 81-3113, 24VDC OUT

TYPICAL CONNECTIONS (9-91)

POWER PACK STYLE



ORDER P/N 75-2400 FOR 24VDC



NOTE: THIS DIFFERS FROM OLDER VERSIONS WITH DUMMY ZERO.



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