

VDC/mADC INPUT, 3½ DIGIT LED DPM  
 "Flat Pack" No Panel Cut Out Required  
 (NEMA 3 or NEMA 4X)

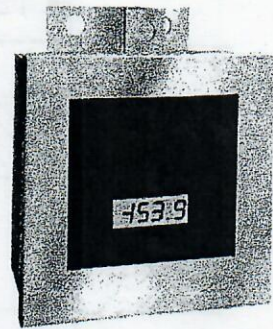
MODEL  
 516



FLAT PACK

**Features**

- 1000 Meg. Input Impedance
- Auto Zero-Auto Polarity
- Single IC Construction
- Single Ended/Differential
- Low Power
- Dual Ramp Conversion
- 50mV = 1000 Counts for DC Current Shunts
- 0.6" Red LED
- 100,000 Hours MTBF



SANITARY

D.C. VOLTS/AMPS

**DESCRIPTION:** The 516 Series is a compact instrument using a single LSI Chip and 4 LED's plus a few discrete components to give maximum reliability in a small package. The unit can be scaled to other than standard reading by means of an internal full scale 12 turn potentiometer that allows ±500 counts of adjustment. The 516 like all other Otek products, is subjected to 150 hour burn-in and 3-100% tests. Its calculated MTBF is over 100,000 hours and field failures are less than 0.05%!

**HOUSING:** Otek's Flat Pack 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 the connections to the wires. No connector or tools required! No behind the panel space needed! The case is U.L. approved ABS Polycarbonate 94VO rated. **NEMA 4X housing option does not have access to the adjustments. If other than Otek's standard setting is required, please specify at the time of ordering.** Our New Sanitary Case is wall, pipe or panel mount and can have up to 2 meters, please specify.

**SPECIFICATIONS AT 25°C**

|  |                                    |
|--|------------------------------------|
| Accuracy and Linearity .....           | ±0.5% ±1 Digit                     |
| Maximum Input, Any Voltage Range ..... | 1000VDC                            |
| Maximum Input, Any Current Range ..... | 200%                               |
| Drift vs. Temperature .....            | ±.005% °C                          |
| Samples/Second .....                   | 4 Nominal                          |
| Input Bias Current .....               | 5pA                                |
| Input Impedance .....                  | 1000 Meg. Nominal                  |
| Common Mode Voltage .....              | 2 Volts (Diff. Type)               |
| Operating/Storage Temp .....           | -10° to 60°C/-20° to +70°C         |
| Power Requirement .....                | 160mA at 5VDC                      |
| Decimal Points .....                   | Selectable                         |
| Display Type .....                     | 3½ Digit 0.6" Red LED              |
| MTBF .....                             | 100,000 Hours                      |
| Sanitary Case .....                    | NEMA 4X up to 250°F Steam Cleaning |

**POWER SUPPLIES:** Externally mounted. Two types are available, the "Open Frame" style accepts 120/240VAC and delivers 5VDC at up to 400mADC. The "Power Pack" is a wall plug in module available only for 120VAC input and delivers 5VDC at up to 200mADC.

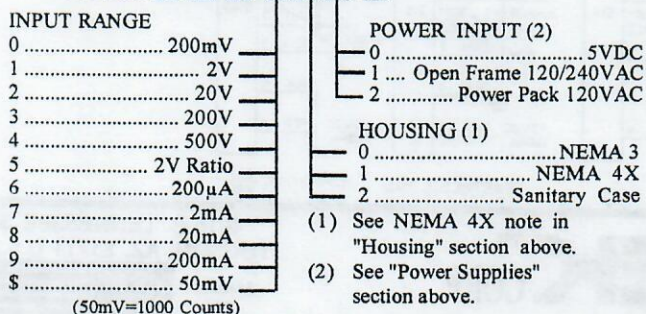
**LEAD COLOR**  
 YELLOW

**TERMINAL DESCRIPTION**

|        |  |
|--------|--|
| YELLOW | + IN: Connect the most positive side of the signal input to indicate a positive reading with respect to -IN. |
| RED    | +5VDC IN: Connect a +5VDC ±10% power supply with a 160mA source capability.                                  |
| WHITE  | - INPUT: Connect the most negative side of the input signal.   |
| BLACK  | GROUND: Return for +5VDC; use this terminal to enable decimal points.  |
| GREEN  | SIGNAL COMMON: Connect to -IN for differential input; otherwise, do not connect to any other terminal.       |
| BLUE   | REF. IN OR OUT: This terminal is used when the 516 is ordered in a ratiometric mode. (1V)                    |
| VIOLET | DECIMAL POINT 1.XXX: This decimal point will illuminate when connected to Black.                             |
| ORANGE | DECIMAL POINT 1X.XX: This decimal point will illuminate when connected to Black.                             |
| BROWN  | DECIMAL POINT 1XX.X: This decimal point will illuminate when connected to Black.                             |
| GRAY   | DECIMAL POINT 1XXX.: This decimal point will illuminate when connected to Black.                             |

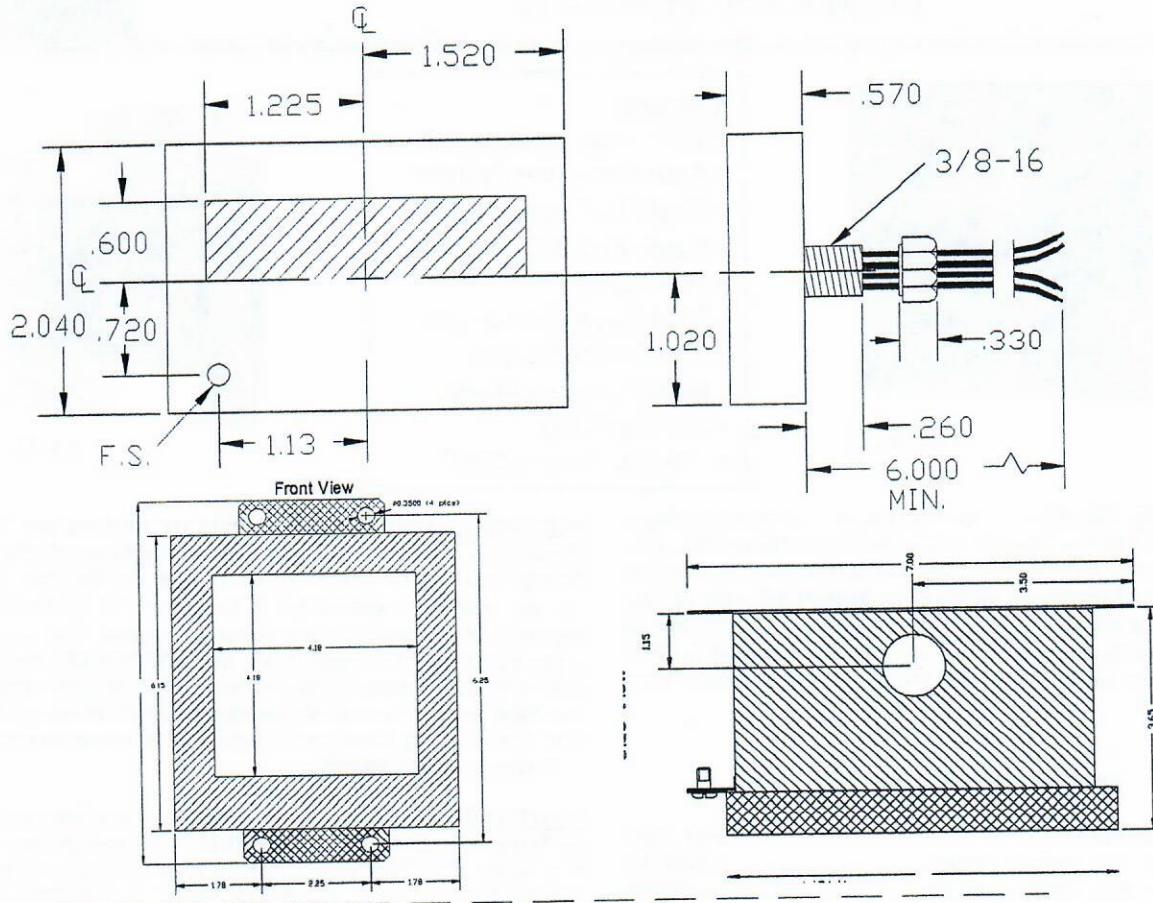
**ORDERING INFORMATION (11/1/00)**

MODEL 5 1 6 - - - - 0

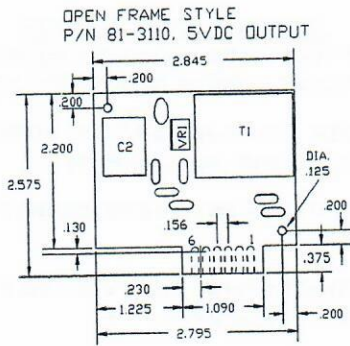


# 516 FLATPACK MECHANICALS & TYPICAL CONNECTIONS

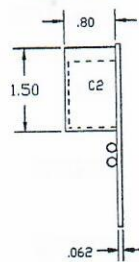
## FLAT PACK W/WIRES



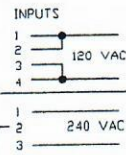
### MECHANICALS FOR POWER SUPPLIES



#### SIDE VIEW

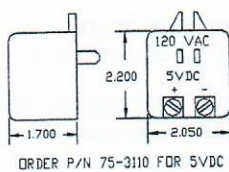


#### OPEN FRAME POWER SUPPLY TYPICAL CONNECTIONS

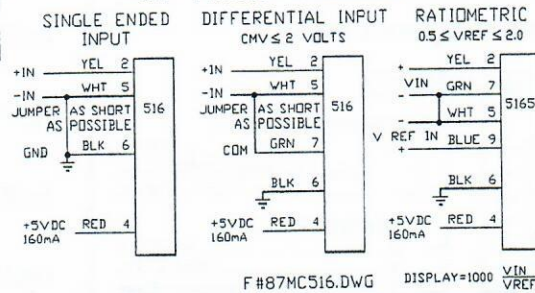


P/N 81-3110, 5VDC OUT  
5 - GROUND  
6 +VCC

#### POWER PACK STYLE



#### "516" TYPICAL CONNECTIONS



F#87MC516.DWG

DISPLAY=1000 VIN/VREF

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**520-748-7900**

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