

NEW
AIRCRAFT
DPM

AVIONICS DIGITAL PANEL METER
FOR MILITARY & COMMERCIAL AIRCRAFT
REPLACES FORM & FIT NSN: 6620-00-083-8811

MODEL
APM



FEATURES:

- STD. 1" Dia. Barrel
- Only 2.15" Deep
- Night Vision Compliant (NVG3 - Green digits only) Optional
- Replaces HI-LO Needle Type
- (4) 0.25" Full LED Digits (9.9.9.9) with OVR
- Color Options: Green, Red or Blue
- To Published Mil-Spec
- To Your Specifications
- Accepts V/mADC Inputs
- Industrial or Mil-Spec Grades
- External VDC powered (Green, Red or Blue digits)
- 4-20mA Loop Powered (Red or Blue digits only!)
- Automatic Lost Signal Detection
- Int'l/Ext'l Intensity Control
- SORRY, NOT FOR EXPORT WITHOUT D.O.D. APPROVAL



DESCRIPTION

Otek's Model **APM** is a four (4) digit green, red or blue LED indicator that accepts standard avionics power of 5-32VDC (Green, Red or Blue digits) and intensity control voltage of 1.5 - 5V 50-440Hz (or DC/Resistance). Otek's exclusive Powerless technique allows the APM to be loop powered (Red or Blue digits only!) which requires only 2 wires to operate.

The heart of the **APM** is an **ASIC** that accepts VDC or mADC and can be scaled (internally) to any value. The unit mounts in a standard avionics 1" diameter hole with four (4) mounting screws and connects to Power and signal via a "Twist Lock" circular connector (DBC53H-10-6P, Mating Cable End: MS347640 (L or M) -6S).

The **APM** is fully sealed and it is not affected by differential pressure, liquid spray (NEMA4X) or humidity (See Specs.).

APPLICABLE MIL-SPECS:

MIL-STD-461D, 462D, 704E, 130K, 810F, 889B2 & 1472F;
MIL-HDBK-217F & 454A.

SPECIFICATIONS @ 25°C & 5VDC ±10%
(Commercial Grade Only)

Powered Models

- Power Input Voltage: 5-32VDC
- Power Consumption: 0.25W Max.
- Intensity Control Input: 1.5 - 5 DC/AC or Resistance
- Input Signal: V/mADC (Specify)
- Display: 4 Each 0.25" (6.5mm) LED Green, Red or Blue
- Night Vision Display: Green Digits Only (NVG3 on Request)
- Accuracy & Linearity: ± 0.05% Of Reading
- Sampling Rate: 3/Second
- Input Impedance: 1M Ohms (V) / 50 Ohm (mA)
- Operating Temperature: -20 to +60°C
- Storage Temperature: -30 to +70°C
- Altitude Operating: 50,000 Feet Max.
- Altitude Storage: 60,000 Feet Max.
- Weight: 1.5oz. (42 gm)

Loop Powered Models

- Burden: 100mW (5V Max)
- Min-Max Signal: 3.6 -36mA
- Specify Input Signal F.S. vs. Display F.S. & Decimal Point
- Other Inputs On Request.

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520-748-7900
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E-MAIL: sales@otekcorp.com
http://www.otekcorp.com

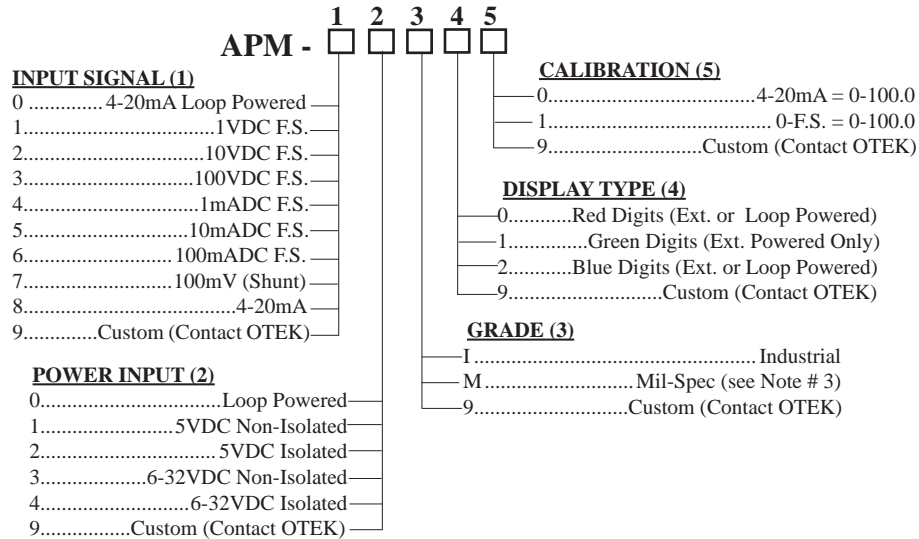
OTЕК™
CORP.
SINCE 1974

4016 E. TENNESSEE ST.
TUCSON, AZ. 85714 U.S.A.

MADE
IN
USA 

NOTE: Please READ BEFORE building part number:

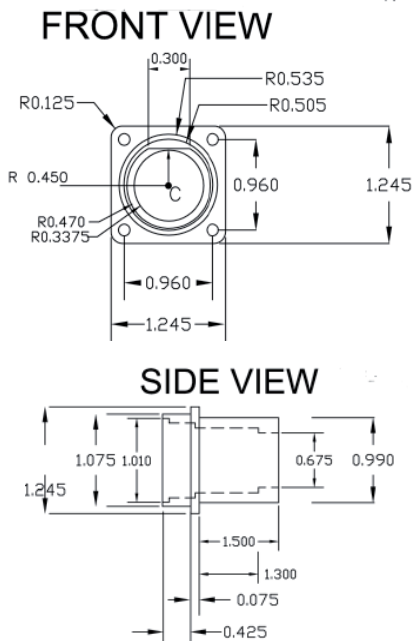
1. If digit 1 is option 0, then digit 2 must be option 0 (and conversely).
2. See notes at bottom of page.



Notes:

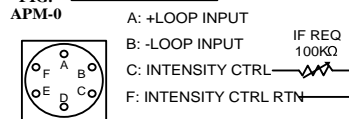
1. The APM has 4 Full Digits and negative sign. Maximum display is -9999 to 9999.
2. Loop Powered Min. Intensity @ 4mA, Max @ 20mA.
3. OTEK will build to certain nuclear or MIL-Standards but testing and confirmation of compliance, if required, will need to be done by third party and at customer's expense.
4. (Green, Red or Blue) digits for Externally Powered units. (Red or Blue) digits for Loop Powered units.
5. Zero & Span (and D.P.) are Internal before sealing & must be specified (if custom) when ordering.

APM MECHANICALS



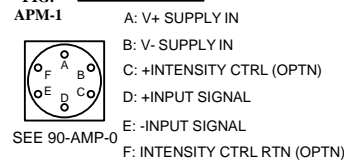
TYPICAL CONNECTIONS

FIG. LOOP POWERED



P/N DBC53H-10-6PN
MATTING: MS3476L10-6S OR EQUIV.(NOT SUPPLIED)
SHELL CHASSIS IS GND

FIG. VDC POWERED



NOTE: INTENSITY CTRL IS CUSTOM SET FOR (VAC/VDC) OR RESISTANCE.
FOR VAC/VDC CONFIGURATION THERE IS NO INTERNAL ISOLATION.