

TECHNICAL NOTE

APM(D) SPECIFICATIONS



The APM(D) (201848) is designed to provide a stable, quiet, DC voltage to our amplified, analog power and energy probes. It includes an on/off switch, power light, analog output BNC, DB-15 detector connector and AC power supply jack.

The APM(D) includes a 9 V battery and a DC power supply. When the unit is turned on, without the supply, it will provide battery power to the detector probe. When the supply is attached the battery is by-passed. The battery can be easily replaced as described on the backside of this data sheet.

Our analog probes, like UM9B-BL-L, must be used with the APM(D) for optimum performance.

FEATURES

- Designed to provide a regulated DC voltage to some of our DB15 connector based, amplified detector probes
- Can be operated on battery only or DC voltage wall supply (both included)
- Includes power on/off switch and power on lamp
- Has a detector analog output BNC connector
- Analog voltage output from +5V to -5V

APPLICATIONS

- Designed to power our Analog Probes for power and/or energy measurements
- For use with an oscilloscope to measure power (V/W) or energy (V/J)
- For use with a Lock In Amplifier for ultimate performance when measuring radiant power (W)

COMPATIBLE DETECTORS

PYROELECTRIC POWER/ENERGY DETECTORS

- UM9B-BL-L (202241)
- QE8SP-B-BL (202017)
- QE8SP-B-MT (201968)

THZ DETECTORS

- THZ9D-20mS-BL (202256)

PHOTODIODE ENERGY DETECTORS

- PE3B-Si (202021)
- PE10B-Si (202019)
- PE5B-Ge (202020)
- PE3B-In (202143)

TECHNICAL NOTE

REPLACING THE BATTERY



Here are the easy steps to removing and replacing the 9V battery in the APM(D):

1. Pick up and hold the APM in one hand.
2. Orient the APM so that the battery compartment is facing you.
3. Insert your thumb nail into the slot provided in the battery holder and lift up. The battery holder will release.
4. Pull the battery holder toward you and out of the APM.
5. Remove the 9 V battery.
6. When placing the new battery in the holder please make sure to orient the battery + and – as shown in the bottom of the battery holder.
7. With the battery in the holder re-insert it into the APM, making sure it is all the way in until it locks in place.

DESCRIPTION	SPECIFICATION
Power Supply	9 V battery
DC Power Supply	9 VDC, 1.66 A 100/220 VAC, 50-60 Hz
Voltage Output	± 4.88 V in 1 kOhm
Battery Access	Removable battery holder
Size	101.6W x 30.5H x 127D mm

TYPICAL APM(D) / DETECTOR SETUPS

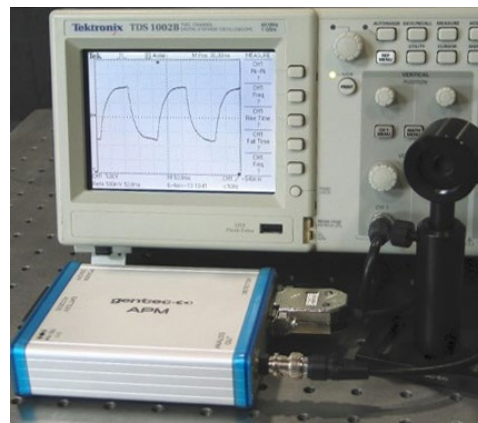


Fig. 1
APM(D) set up with UM9B-BL-L and a digital oscilloscope, measuring power (V/W) at the specified 10 Hz chopping frequency.

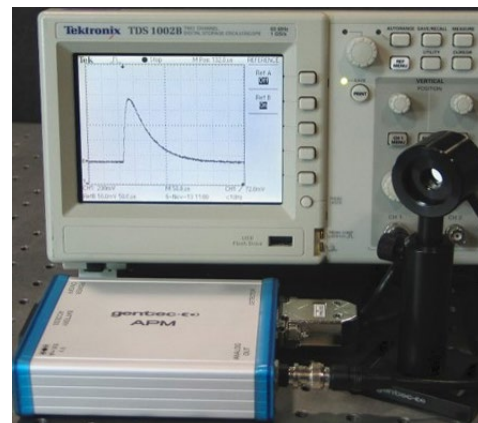


Fig. 2
APM(D) set up with a QE8SP-B-MT Pyroelectric Joulemeter probe and a digital oscilloscope measuring pulse energy (V/J).