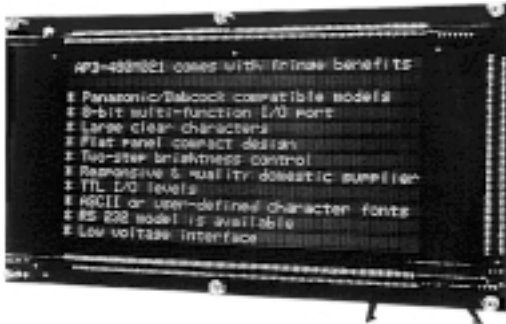


## Plasma Panel Display Modules

### 480 Character Display with Drive Electronics Controller and Serial Interface



**FEATURES**

- 480 (12 x 40) alphanumeric characters (5 x 7 dot matrix)
- Only + 5 and + 12 VDC required
- ASCII character set (optional character sets available)
- Efficient serial interface
- Two step brightness control
- Wide viewing angle (150°)
- Rugged design/slim profile
- Flicker free refresh
- Editing functions

The APD-480M021-1 consists of a DC plasma panel display, drive circuitry and controller. The interface is through a single 4 pin power connector that only requires + 5 VDC, + 12 VDC, Ground and Serial Data inputs. Handshaking is not required as a 20 byte FIFO buffer is used to capture data when the display is busy. Dale's® patented open construction display technology assures a stable, flicker free screen. The controller maintains all the refresh memory, character generation and control logic. Various editing functions are available such as scrolling, inserting and deleting characters. The module can also be dimmed or blanked for screen highlighting. Serial data protocol is 8 data bits, no parity, 1 start bit and 1 stop bit. Baud rate (300, 1200 or 9600) is selected with a control board jumper. A self test can be manually performed by removing a jumper. The EPROM based character generator is programmed with an ASCII character set, but is easily configured for any character set.

**OPTICAL SPECIFICATIONS**

**Viewing Area:** 7.56" [192.02mm] W x 3.74" [95.00mm] H.

**Number of Characters:** 480.

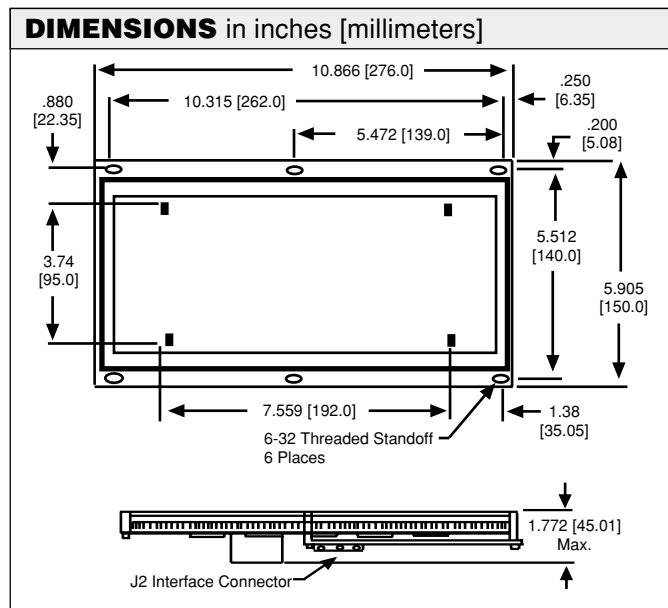
**Character Size:** 0.146" [3.708mm] W x .209" [5.309mm] H.

**Luminance:** 60 foot lamberts.

**Color:** Neon orange.

**Viewing Angle:** 150° cone.

STANDARD ELECTRICAL SPECIFICATIONS				
	MIN.	TYP.	MAX.	UNITS
Logic Supply Voltage	+ 4.75	+ 5.0	+ 5.25	V
Logic Supply Current	—	—	750	mA
Panel Supply Voltage	11.4	12.0	12.6	V
Panel Supply Current	—	.7	2.5	A



ORDERING INFORMATION	
DESCRIPTION	PART NUMBER
Display, Drive Electronics, Controller .....	APD-480M021-1
Interface Connector Kit .....	280108-05
Non-Glare Filter (amber circular polarized) - other filters available, contact factory .....	280109-11
Parallel Interface Version .....	APD-480M021/-2