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# PMD 3600 SERIES TRICOLOR LED MASTER MARQUEE DISPLAY

## FEATURES:

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- 1 to 8 Lines
- 5 to 80 Tricolor (red, green, amber) LED Characters per Line
- 2 to 8" (50.8 to 203.2 mm) High Characters
- Eight International Character Sets
- 16K to 128K Memory
- 4 Variable Data Sets
- NEMA 12 or NEMA 4 enclosure
- Free Message Programming Software
- Data Logging



The PMD 3600 Series is a large master marquee display available in 11.5", 16.3", and 25.9" (292.1, 414, and 657.9 mm) heights and 40", 76", and 150" (1016, 1930.4, and 3810 mm) widths in a total of eight different sizes (maximum height and maximum width model is not available).

The PMD 3600 Series uses attention-getting Tricolor (red, green, amber) LED colors in 2", 4", 6" or 8" (50.8, 101.6, 152.4, or 203.2 mm) character heights to indicate equipment status instantly.

These versatile displays also let you adjust character and line heights, add blinking,

scrolling, and unveiling effects, and feature multiple messages simultaneously.

The PMD 3600 Series offers suspended mounting using either the eyebolts on top or mounting kits that allow adjustable angled viewing. Two knockouts are provided in the PMD 3600's steel case for the routing of wires. Fuses, connectors, and switches are accessed by removing the back panel.

A scratch-resistant lens/filter on the front panel covers the LED field and protects the inside of the unit.

Marquee Display Options								
PMD 3600 Series		CHARACTERS					VIEWING AREA	
MODEL	DISPLAY	2"	4"	6"	8"	8" N	HEIGHT	WIDTH
1W2H	LINES	2	1	—	—	—	5.3" (134.6 mm)	36.5" (927.1 mm)
	CHARACTERS PER LINE	20	10	—	—	—		
1W4H	LINES	4	2	1	1	1	10.1" (256.5 mm)	36.5" (927.1 mm)
	CHARACTERS PER LINE	20	10	6	5	10		
2W2H	LINES	2	1	—	—	—	5.3" (134.6 mm)	72.5" (1841.5 mm)
	CHARACTERS PER LINE	40	20	—	—	—		
2W4H	LINES	4	2	1	1	1	10.1" (256.5 mm)	72.5" (1841.5 mm)
	CHARACTERS PER LINE	40	20	13	10	20		

Several versions of the PMD 3600 Series are available. They differ in the way they can communicate with external devices and/or PLCs.

**PMD 3600** Messages are triggered via the 16-bit parallel port.

Note: In the following models, the PMD 3600 parallel port, the associated Message Control Terminals, and the Power In/Power Out Terminals have been removed and replaced by

the PLC interface connector located on the interface board. Please be advised that all of the direct PLC interface units require you to punch a hole to accommodate the wiring. Please be careful of metal filings.

**PMD 3650** is essentially a PMD 3600 which directly interfaces to an Allen-Bradley PLC2, PLC3, or PLC5 through Remote I/O Block Transfer or Data Highway/Plus. Each of these modes operates independently from the other and the PMD 3650 can be configured to communicate using any one of them. PMD 3650 has all of the PMD 3600 features, but receives communication through twinaxial cable ("blue hose").

**PMD 3660** is very similar to the PMD3600 and contains an interface to Siemens/TI Series 545 CPU (and the 560 and 565 CPUs used in conjunction with the Siemens/TI RCC module) which have the RS-485 remote I/O module. The PMD 3660 will appear as an Remote Base Controller (RBC) to the Siemens/TI PLC. PMD 3660 can also listen to an existing RBC and use the information from it.

**PMD 3680** has all of the PMD 3600 capabilities but contains support for a Genius Network Adapter (GENA) board which allows the PMD 3680 to be configured as a node on the Genius I/O system. The PMD 3680 can be configured as an I/O block on a Genius I/O system and will receive data from a bus interface module. A bus interface module is typically a PLC with a Genius bus controller module or a PCIM card installed in a personal computer. The PMD 3680 will exist on the Genius I/O network as an I/O block broadcasting its inputs to the bus and reading the outputs sent to it by the bus controller.

# SPECIFICATIONS

## DISPLAY

**Number of Lines:**  
1-8 (see table on page 94)

**Characters per Line:**  
5-80 (see table on page 94)

**Size of Characters:**  
2", 4", 6", 8", and 8" Narrow  
(50.8, 101.6, 152.4, and 203.2 mm)

**Character Form:**  
2" (50.8 mm) = 5 x 7 dot matrix  
4" (101.6 mm) = 10 x 14 dot matrix  
6" (152.4 mm) = 15 x 21 dot matrix  
8" (203.2 mm) = 20 x 28 dot matrix  
8" (203.2 mm) Narrow = 10 x 28 dot matrix

**Viewing Distance:**  
2" (50.8 mm) = 100 ft (30.48 m)  
4" (101.6 mm) = 200 ft (60.96 m)  
6" (152.4 mm) = 300 ft (91.44 m)  
8" (203.2 mm) = 400 ft (121.92 m)

**Character Sets:**  
All standard ASCII upper/lower case and symbols  
Eight, including: U.S., Cyrillic, Danish, German, English, French, Swedish, and Japanese Kana

## ELECTRICAL

**Power Source:**  
**AC Units (jumper selectable):** 115 VAC (102-132) 47-63 Hz or 230 VAC (194-250) 47-63 Hz

**Current Draw:**  
1W2H-75 VA  
1W4H/2W2H-135 VA  
1W8H/2W4H/4W2H-255 VA  
2W8H/4W4H-495 VA

**Built-In Supply (PMD 3600-only):**  
12 VDC, 350 mA max.

**Interference:**  
NEMA ICS 2-230 Showering Arc Test

**Tolerance:**  
ANSI C37.90a-1974 (SWC) Surge Withstand Capability Test

**Relay Contacts:**  
Form C Relay, 3 A @ 230 VAC or 30 VDC, max.

## ENVIRONMENTAL

**Temperature (Ambient):**  
**Operating:**  
32 to 140 °F (0 to 60 °C)  
**Storage:**  
-40 to +203 °F (-40 to +95 °C)

**Humidity:**  
10 to 95% RH Noncondensing

**NEMA Ratings:**  
NEMA 12  
(NEMA 4 and NEMA 4X optional)

## CLOCK

**Data Log/Real-Time Clock Battery:**  
1/2AA Lithium, 3.6 V

**Battery Life:**  
Typically 5 years (minimum, 1-1/2 years) OFF continuously

**Clock Accuracy:**  
1 minute per month error (maximum)

## MEMORY

**Memory Message Type:**  
EEPROM (16, 32, 64, or 128 K)

**EEPROM Life:**  
Minimum 10,000 changes to a given location

**Memory Usage:**  
Approximately 175 80-character messages per 16 Kbytes of EEPROM memory

## MECHANICAL

**Mounting:**  
Suspended mounting using either the eyebolts on top or optional mounting kits that allow adjustable-angle viewing.

**Housing:**  
14 ga steel (Type 304 stainless steel-optional)

## CONNECTIVITY

### Power Input Terminal Block:

Wire-clamp screws for 12-18 AWG

### Serial Ports, Relay, and Control Terminal Blocks:

Wire-clamp screws for 18-22 AWG

### 3650 A-B PLC Connector:

Terminal Block

### 3660 Siemens/TI PLC Connector:

Terminal Block

### 3680 GE Genius I/O:

Terminal Block

## PORTS

### Programming Port:

**Baud Rate\*:**

300, 600, 1200, 2400, 4800, 9600

**Parity:**None, Odd, Even

**Stop Bits:**1, 2

**Data Bits:**8

### Printer Port:

**Baud Rate\*:**

300, 600, 1200, 2400, 4800, 9600

**Parity:**None, Odd, Even

**Stop Bits:**1, 2

**Data Bits:**8

### Tape Port:

**Baud Rate\*:**

300, 600, 1200, 2400, 4800, 9600

**Parity:**None

**Stop Bits:**1

**Data Bits:**8

*\* Note: the same connector is used for Programming, Printer, and Tape Port.*

### Computer Interface Port:

**Baud Rate:**

300, 600, 1200, 2400, 4800, 9600

**Parity:**None, Odd, Even

**Stop Bits:** 1, 2

**Data Bits:** 8

**Checksum:** None, CRC, EOR

**Protocol:** UTICOR, ASCII

### Slave Port:

**Baud Rate:** 9600

**Parity:** None

**Stop Bits:** 1

**Data Bits:** 8

**Protocol:** UTICOR

### Parallel Port:

(PMD 3600 only)

**Screw Terminals:** 18-22 AWG

**Inputs:** 20 (16 data, 4 control)

**Input voltage:**

5-30 VDC, 75 mA @ 10 VDC,  
200 mA @ 30 VDC

(All 20 inputs on)

**Source Inputs (Factory Set):**

Sink inputs (internal jumper)  
BCD or Binary Inputs (software selected)

Inverted or noninverted inputs  
(software selected)

Input debounce time: 0-99 ms  
(software selected)

Input scan time: 0-99 ms  
(software selected)

## HOUSING WEIGHT

Version	W/Hanging Kit
1W2H	47 lb (21.3 kg)
1W4H	65 lb (29.5 kg)
1W8H	101 lb (45.8 kg)
2W2H	81 lb (36.7 kg)
2W4H	112 lb (50.8 kg)
2W8H	178 lb (80.7 kg)
4W2H	189 lb (85.7 kg)
4W4H	250 lb (113.4 kg)