

## Digital Marquee Series



Part # DM-0213-T



Part # DM-0113-T



Part # DM-0220-T



Part # DM-0420-T

Table 4—Input Connector Pinout

Pin Number	Description	Cable Color Code
1	Input #1 Binary Value 1	White
2	+24 Vdc (sensor Power Supply Output)	Brown
3	Input #3 Binary Value 4	Green
4	Input #2 Binary Value 2	Yellow
5	Input #4 Binary Value 8	Grey
6	Input #5 Binary Value 16	Pink
7	Common (24 Vdc GND)	Blue
8	Input #7 Binary Value 64	Red
9	Spare	Orange
10	Input #6 Binary Value 32	Tan

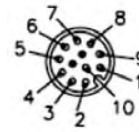


Table 1—Input Binary values

Input	Binary Value
1	1
2	2
3	4
4	8
5	16
6	32
7	64

### PRODUCT DESCRIPTION

The Digital Marquee Series is a simple and easy way to display messages on a marquee sign. The user can program up to 128 canned messages into the marquee and use binary inputs to call up the selected message on the marquee. This binary input can come from any digital source such as plc outputs or BCD thumbwheel switches. The Digital Marquee has a built in web server, eliminating the need to install software to program the marquee sign. Setup of the display is as simple as opening a web browser on your computer and entering the IP address of the marquee sign. The Digital Marquee allows the user to configure the messages, connect their binary source, and begin displaying messages based upon the binary value. With no software to install, canned messages, and digital inputs, the Digital Marquee series is the simplest way to display messages on a marquee.

### PRODUCT FEATURES

- **NO SOFTWARE TO INSTALL!** Web based setup
- 128 message storage capability in the marquee sign
- Digital inputs (binary) to select message
- Ethernet port for connection with PC
- Network configured over ethernet or IR programmer
- Time/Date settings and configuration over ethernet
- Backup and restore configuration of the marquee sign

### PRODUCT SPECIFICATIONS

- 1, 2 and 4 line alphanumeric display
- 13 and 20 tri-color LED character width
- Operating temperature 0-55 C
- 100,000 hour rated LED life
- Metal housing; NEMA 1
- Hand held IR programmer
- 120 VAC power; 24 VDC (1 line model)

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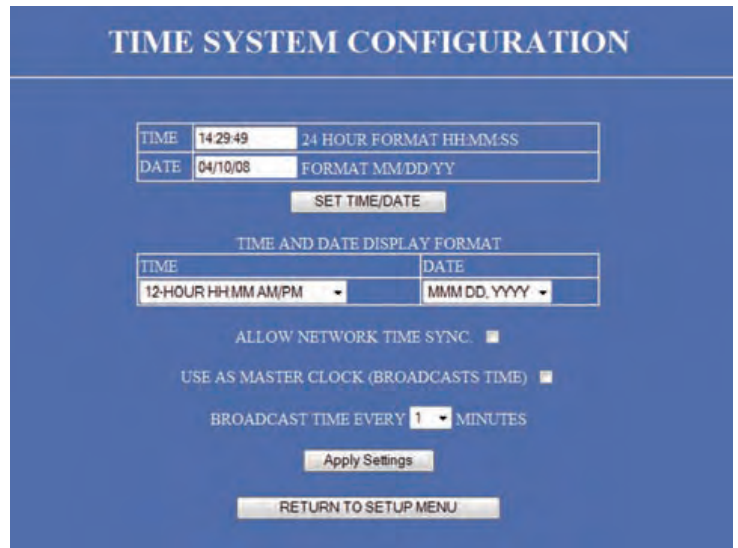
With proper authorization, the user can enter into the marquee sign setup menu. This web page is where the user has access to the marquee configuration pages used to set up the marquee sign.

By selecting the "Edit Marquee Messages" button, the user can set up the message text, font size, color, and functionality of the message to be displayed on the marquee sign.



By selecting the "Configure Network" button, the user can set the IP address and network settings for the marquee sign. The user ID and Password can also be changed from this page.

By selecting the "Time/Date Setup" button, the user can set the time and date for the marquee sign. The format of the time and date and selecting network time synchronization are entered here.



PART NUMBER MODEL (*)	DIMENSIONS (W x H x D)	WEIGHT
DM-0113-T (1 line, 13 character, tricolor)	26.0" x 4.5" x 1.75"	2.8 LBS.
DM-0213-T (2 line, 13 character, tricolor)	25.5" x 6.25" x 3.75"	10.8 LBS.
DM-0220-T (2 line, 20 character, tricolor)	39.75" x 6.25" x 3.75"	17.9 LBS.
DM-0420-T (4 line, 20 character, tricolor)	39.75" x 11.0" x 3.75"	26.2 LBS.

(\*) Double sided models available

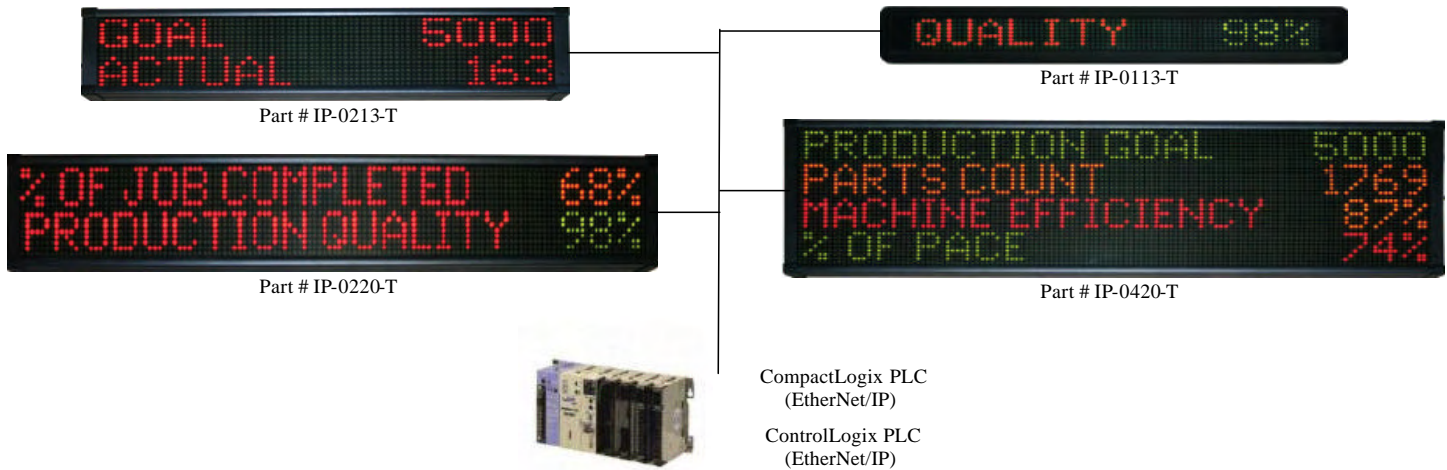
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## ETHERNET IP MARQUEE SERIES (ROCKWELL EtherNet/IP)



### PRODUCT DESCRIPTION

The Ethernet IP Marquee revolutionizes the industrial market on how a marquee sign should connect and communicate on the Rockwell Ethernet/IP network. The Ethernet IP Marquee has a built in WEB server, eliminating the need to install software to program the marquee sign. Setup of the display is as simple as opening a WEB browser on your computer and entering the IP address of the marquee sign. With its fully integrated package, the Ethernet IP Marquee allows the user to configure and broadcast plc data and message information without programming communication blocks within the ladder logic code of the plc. The product's innovation allows the user to set up the functionality of the marquee sign and simply connect to the Rockwell plc. The messages displayed on the marquee can be alarms, machine performance, or production data. These messages are selected and displayed through internal registers from the plc. The format of these registers can be any combination of bits, words, or strings. The Ethernet IP Marquee has an additional ethernet port built into the marquee sign. This second port gives the marquee the flexibility to broadcast information to any computer on the plant network through the web server. This computer can monitor production data and collect real time information from the plant floor by simply entering the IP address of the marquee. Also, third party spreadsheets can be used to monitor and store the information broadcasted by the marquee sign. With no software to install, the Ethernet IP Marquee stands alone as the new innovative way for a marquee sign to communicate on the Rockwell Ethernet/IP network.

### PRODUCT FEATURES

- **NO SOFTWARE to INSTALL !!!** Web based setup
- EtherNet/IP protocol (CompactLogix, ControlLogix)
- Direct register access to plc from marquee sign
- 2nd ethernet port for data collection to PC
- Monitor plc registers through built-in web browser
- Broadcast alarm messages from the PLC
- Backup and restore configuration of marquee sign
- Collection of real time data from plant floor

### PRODUCT SPECIFICATIONS

- 1, 2 and 4 line alphanumeric display
- 13 and 20 character width
- Bright tri-color LED characters
- Operating temperature 0-55 C
- 100,000 hour rated LED life
- Metal housing
- IR programming port
- Mounting hardware included

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Upon entering the IP address of the marquee sign from the web browser, the monitor page is displayed. This web page is where user configured process values and variable data can be viewed.

## FACTORYplc MARQUEE MONITOR PAGE

PRODUCTION GOAL	5392
PRODUCTION COUNT	3930
DOWNTIME	0
MACHINE EFFICIENCY - OEE	0.0
% COMPLETE	0.0
HISTORICAL PRODUCTION COUNT	0
HISTORICAL DOWNTIME	0
VARIABLE DATA 7	0
VARIABLE DATA 8	0
VARIABLE DATA 9	0

Apply Changes

MARQUEE CONFIGURATION

With proper authorization, the user can enter into the marquee sign setup menu. This web page is where the user has access to the marquee configuration pages used to set up the marquee sign.



By selecting the “Edit Marquee Messages” button, the user can set up the message text, font size, color, and functionality of the message to be displayed on the marquee sign.

## MESSAGE EDIT PAGE

MSG #	MSG TEXT	FONT	LINE	COLOR	FLASH	MINIMUM DISPLAY TIME
1	OPERATION COMPLETE - INSERT NEW PART	2"	LINE 1	VD 0	<input checked="" type="checkbox"/>	2 SEC
2	CALL MAINTENANCE !!!!!	4"	LINE 1	RED	<input checked="" type="checkbox"/>	10 SEC
3	JOB COMPLETED, BATCH COUNT REACHED	2"	LINE 1	VD 1	<input checked="" type="checkbox"/>	2 SEC
4	TEMPERATURE NORMAL	2"	LINE 1	GREEN	<input checked="" type="checkbox"/>	2 SEC
5	CONVEYOR STOPPED	2"	LINE 1	YELLOW	<input checked="" type="checkbox"/>	2 SEC
6	PART JAMMED - RESET MACHINE	2"	LINE 1	RED	<input checked="" type="checkbox"/>	2 SEC
7	SAFETY MEETING 2:00 P.M.	2"	LINE 2	GREEN	<input checked="" type="checkbox"/>	30 SEC
8	ASSEMBLY STAGE 3	2"	LINE 1	GREEN	<input checked="" type="checkbox"/>	2 SEC
9	E-STOP PUSHED - PROCESS STOPPED	2"	LINE 2	RED	<input checked="" type="checkbox"/>	5 SEC
10	CRITICAL ALARM - PROCESS HALTED	2"	LINE 2	RED	<input checked="" type="checkbox"/>	5 SEC

APPLY CHANGES

MESSAGES 11-20

MESSAGES 21-30

MESSAGES 31-40

MESSAGES 41-50

MESSAGES 51-60

MESSAGES 61-70

MESSAGES 71-80

MESSAGES 81-90

MESSAGES 91-100

MARQUEE SETUP MENU

By selecting the “Variable Data Configuration” button, the user can set up the variable data from the plc to be displayed on the marquee sign. The format of the variable data is entered here.

## VARIABLE DATA CONFIGURATION

MAIN PAGE TITLE : FACTORYplc MARQUEE MONITOR PAC

### MONITOR PAGE CONFIGURATION

DATA	DATA DESCRIPTION	# DIGITS	PRECISION	FORMAT	JUSTIFY	COLOR	MONITOR DISPLAY
0	PRODUCTION GOAL	5	0	LEADING SPACES	RIGHT	RED	<input checked="" type="checkbox"/>
1	PRODUCTION COUNT	5	0	LEADING SPACES	RIGHT	GREEN	<input checked="" type="checkbox"/>
2	DOWNTIME	5	0	LEADING SPACES	RIGHT	GREEN	<input checked="" type="checkbox"/>
3	MACHINE EFFICIENCY - OEE	3	1	LEADING SPACES	RIGHT	YELLOW	<input checked="" type="checkbox"/>
4	% COMPLETE	3	1	LEADING SPACES	RIGHT	FLASH RED	<input checked="" type="checkbox"/>
5	HISTORICAL PRODUCTION COUNT	5	0	LEADING SPACES	RIGHT	FLASH GREEN	<input checked="" type="checkbox"/>
6	HISTORICAL DOWNTIME	5	0	LEADING SPACES	RIGHT	FLASH YELLOW	<input checked="" type="checkbox"/>
7	VARIABLE DATA 7	5	0	LEADING SPACES	RIGHT	RED	<input checked="" type="checkbox"/>
8	VARIABLE DATA 8	5	0	LEADING SPACES	RIGHT	RED	<input checked="" type="checkbox"/>
9	VARIABLE DATA 9	5	0	LEADING SPACES	RIGHT	RED	<input checked="" type="checkbox"/>

Apply Changes

RETURN TO SETUP MENU

### PART NUMBER MODEL

### DIMENSIONS (HxWxD)

### WEIGHT

**IP-0113-T (1 line, 13 character, tricolor)**

**4.5" x 26.0" x 3.75"**

**2.8 LBS.**

**IP-0213-T (2 line, 13 character, tricolor)**

**6.25" x 25.5" x 3.75"**

**10.8 LBS.**

**IP-0220-T (2 line, 20 character, tricolor)**

**6.25" x 39.75" x 3.75"**

**17.9 LBS.**

**IP-0420-T (4 line, 20 character, tricolor)**

**11.0" x 39.75" x 3.75"**

**26.2 LBS.**

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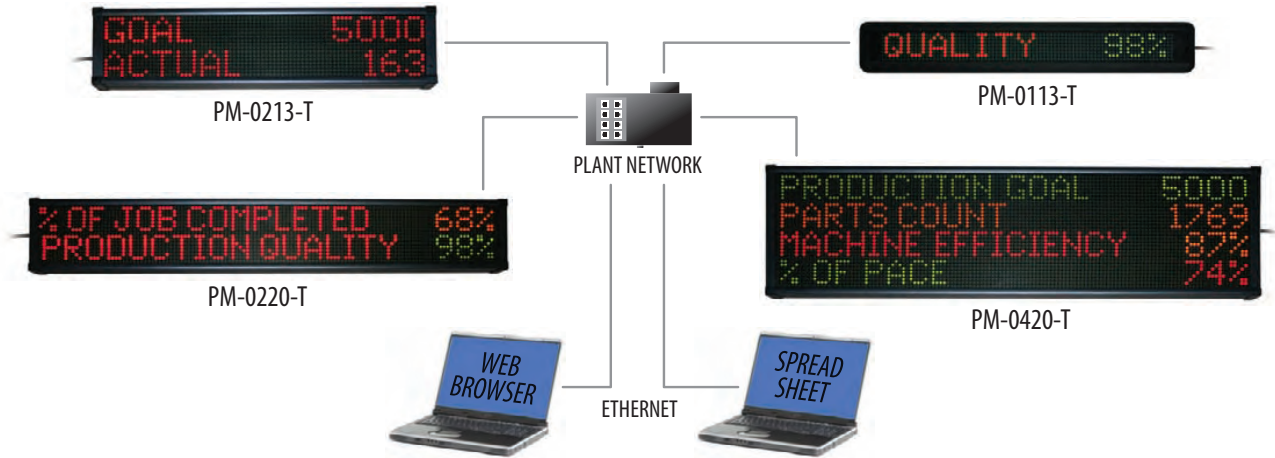
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# DATAVISOR MARQUEES

View Production Data  
Anywhere in the World



## PRODUCTION MARQUEE SERIES



### PRODUCT FEATURES

- NO SOFTWARE REQUIRED! Embedded web server
- Integrated production monitoring system
- Selection menu of 30+ data source input variables
- Monitor production data through web browser
- Collect real time data over ethernet
- Store production data to 3rd party spreadsheets
- Selectable downtime reason codes
- Programmable break and downtime schedules
- Variable event driven color changes
- Machine state text and override messages
- Upgradable firmware (update to new features)
- Backup and restore application/program

### PRODUCT SPECIFICATIONS

- 1, 2, and 4 line alphanumeric display
- 13 and 20 character width; tricolor LED
- 6 programmable inputs (24 VDC PNP)
- Dual mode data display (2 and 4 line models)
- Quad mode data display (1 line model)
- 10/100 ethernet communication port
- 100,000 hour rated LED life
- Operating temperature 0-55 C
- Metal housing; NEMA 1
- Hand held IR programmer
- 120 VAC power; 24 VDC (1 line model)
- Sensor power supply (24 VDC @ 1 amp)

PART NUMBER MODEL	DIMENSIONS (W x H x D)	WEIGHT
PM-0113-T (1 line, 13 characters, tricolor)	26.0" x 4.5" x 1.75"	2.8 LBS.
PM-0213-T (2 line, 13 characters, tricolor)	25.5" x 6.25" x 3.75"	10.8 LBS.
PM-0220-T (2 line, 20 characters, tricolor)	39.75" x 6.25" x 3.75"	17.9 LBS.
PM-0420-T (4 line, 20 characters, tricolor)	39.75" x 11.0" x 3.75"	26.2 LBS.

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# WEB BROWSER SCREEN CAPTURES

## Production Marquee Series Set Up and Functionality

### CONFIGURATION SETUP MENU

BACKUP / RESTORE	MONITOR PAGE
BREAK AND DOWN TIMES	NETWORK SETTINGS
COUNT / RATE / TAKT TIMER / DOWNTIME	STATE TEXT AND OVERRIDE MESSAGES
EVENT DRIVEN COLOR CHANGES	TIME BASED RESET
INPUTS	TIME SYSTEM SETTINGS
JOBS SETTINGS PAGE	WEB DATA
MESSAGE DISPLAY AND DATA SOURCE	
RETURN TO MONITOR PAGE	

### MESSAGE AND DATA CONFIGURATION

GOAL COUNT PER SHIFT : 100

CHARACTER HEIGHT : 2\* 2 LINES

MARQUEE DISPLAY LINE CONFIGURATION

LINE #	LINE USAGE	DATA FORMAT	LINE TEXT	TEXT COLOR	DATA SOURCE	DATA COLOR
1	TEXT & DATA	99999	GOAL	GRN	GOAL	GRN
2	TEXT & DATA	99999	ACTUAL COUNT	RED	TOTAL COUNT BAD COUNT	VARIABLE 1

DUAL MESSAGE DISPLAY MODE CONFIGURATION

LINE #	ACTIVE	LINE USAGE	DATA FORMAT	LINE TEXT	TEXT COLOR	DATA COLOR
1	<input checked="" type="checkbox"/>	TEXT & DATA	99999	PACE COUNT	RED	GRN
2	<input checked="" type="checkbox"/>	TEXT & DATA	99999	% PACE	RED	VARIABLE 2

MESSAGE CYCLE TIME FOR DUAL MODE (in sec)

Apply Changes

RETURN TO SETUP MENU

GOAL-COUNT  
 % BAD  
 % COMPLETE  
 TARGET COUNTER  
 % OF TARGET COUNTER  
 HISTORICAL COUNT  
 DOWNTIME  
 RUN TIME  
 SETUP TIME  
 USER MODE TIME  
 HISTORICAL DOWNTIME  
 CURRENT CYCLE TIME  
 LAST CYCLE TIME  
 SHORTEST CYCLE TIME  
 LONGEST CYCLE TIME  
 AVERAGE CYCLE TIME  
 RATE / PER SECOND  
 RATE / PER MINUTE  
 RATE / PER HOUR  
 Takt TIME ELAPSED  
 Takt TIME REMAINING  
 QUALITY  
 MACHINE AVAILABILITY  
 MACHINE PERFORMANCE  
 OEE  
 MACHINE STATE  
 TIME

# APPLICATION EXAMPLES

## OEE (Overall Equipment Effectiveness):

This setup of the marquee uses several of the data sources to configure this calculation. Using Machine Availability (runtime/total time), Machine Performance (average cycle time/expected cycle time), and Quality (good parts/total parts) calculates the OEE of your process.

## KPI's (Key Performance Indicators):

This setup of the marquee displays production data and process information. Total Count, Bad Count, Rate, Cycle Time, and Downtime are several of the selectable KPI's to display on the marquee. KPI's help address your production problems immediately saving setup time, reducing downtime, and producing a higher quality part. Machine operators and plant management can view, monitor, and collect real time KPI's that inform and motivate from the marquee.

## Real Time KPI's with Message Call Inputs:

In addition to displaying KPI's, this setup of the marquee utilizes inputs to broadcast an "override" message on a selected line of the marquee. Downtime, maintenance, and setup messages can be displayed on the marquee when the corresponding input becomes active. An elapsed timer is also displayed to show how long the manufacturing process has been in this condition.

## Event Driven Color Changes:

This setup of the marquee allows the data source to control color change within the marquee based on percentages of that selected data source. All 30+ production data sources inputs have this capability. Displayed data sources can be shown in green when on pace, yellow when falling behind, or blinking red when below the required target.

## Takt Time (Target Counter) Pace Tool:

This setup of the marquee is used to help machine operators understand the environment of their manufacturing process. The target counter, an actual count, a remaining or elapsed takt timer, percent of target counter, and the daily goal are all calculated to display the real time process data for both the operator and production supervisor to view on the plant floor.

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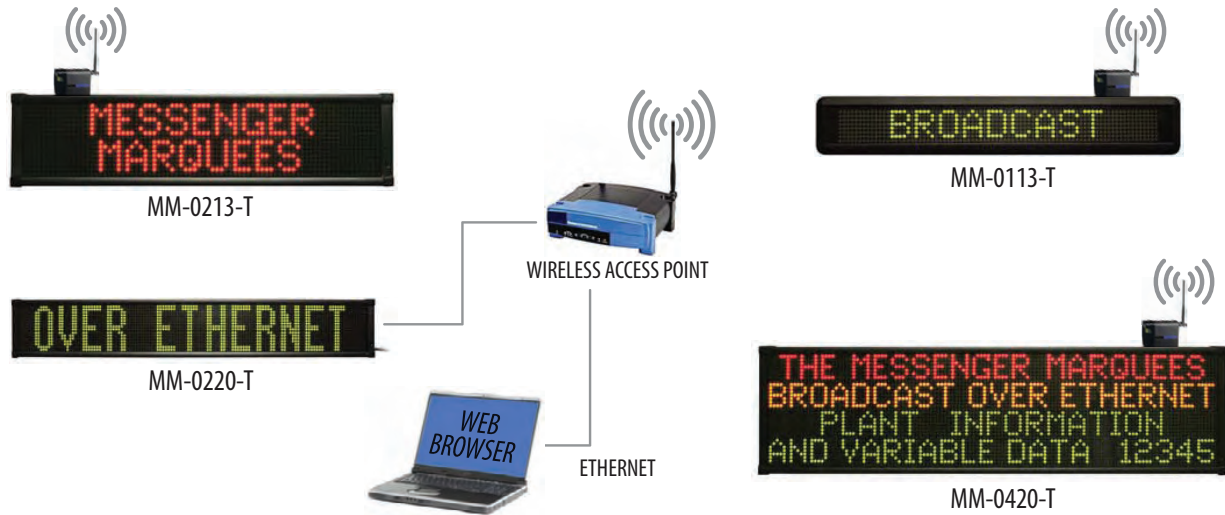
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# DATAVISOR MARQUEES

3 Connections / ONE Product



## MESSENGER MARQUEE SERIES



### PRODUCT FEATURES

- NO SOFTWARE REQUIRED! Embedded web server
- Selection of 25+ display message modes
- Web based message editor and controller
- 10/100 ethernet communication port
- UDP message functionality
- Serial communication port (RS232/RS485)
- Receive data/alarms from EXOR UniOP HMI
- Broadcast company information & lost time data
- Display variable data from ERP systems
- Display 3rd party spreadsheet data to marquee

### PRODUCT SPECIFICATIONS

- 1, 2, and 4 line alphanumeric display
- Bright tricolor LED
- Display 2", 3", or 4" character height
- 13 and 20 character width
- 100,000 hour rated LED life
- Operating temperature 0-55 C
- Metal housing; NEMA 1
- Hand held IR programmer
- 120 VAC power; 24 VDC (1 line model)
- Upgradable firmware (update to new features)

PART NUMBER MODEL	DIMENSIONS (W x H x D)	WEIGHT
MM-0113-T (1 line, 13 characters, tricolor)	26.0" x 4.5" x 1.75"	2.8 LBS.
MM-0213-T (2 line, 13 characters, tricolor)	25.5" x 6.25" x 3.75"	10.8 LBS.
MM-0220-T (2 line, 20 characters, tricolor)	39.75" x 6.25" x 3.75"	17.9 LBS.
MM-0420-T (4 line, 20 characters, tricolor)	39.75" x 11.0" x 3.75"	26.2 LBS.

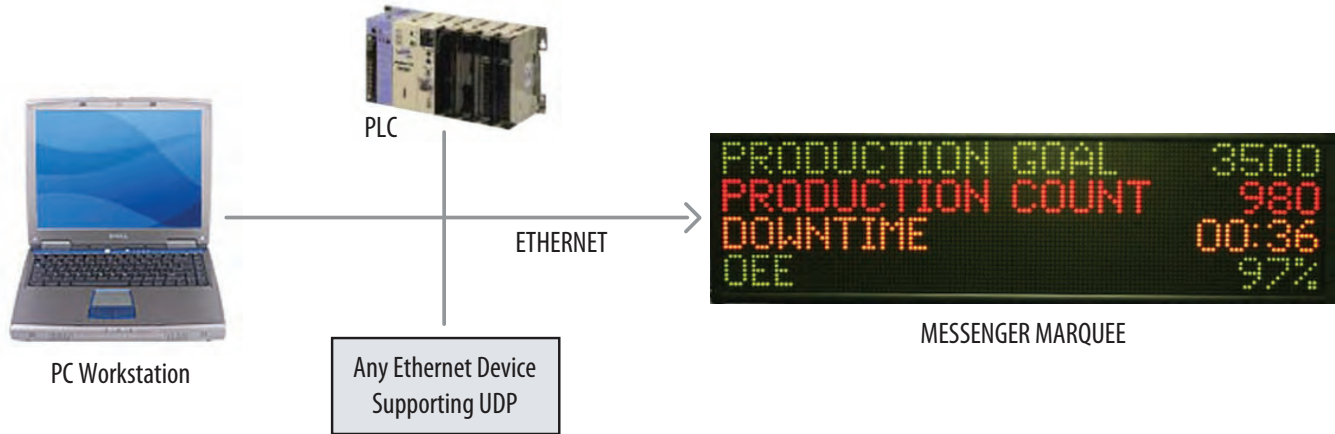
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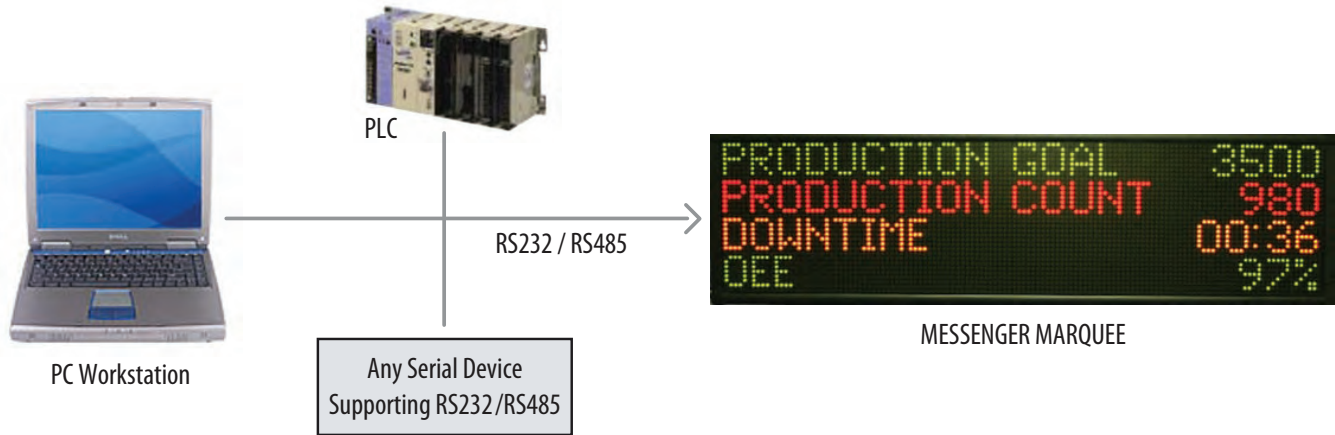
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# CONNECTIVITY SOLUTIONS

## ETHERNET CONFIGURATION



## SERIAL CONFIGURATION



## EXOR HMI CONFIGURATION



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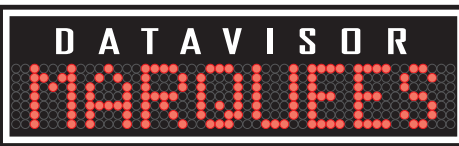
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1/8th DIN PRODUCTION  
MONITORING SOLUTION



## Production Panel Meter Series



Part # PPM-0106-LED



Part # PPM-0216-VF



Part # PPM-0216-LCD

### PRODUCT DESCRIPTION

The The Production Panel Meter series displays production information on the plant floor PLUS broadcasts this real time production data over ethernet to any computer on the plant network. With a built-in web server, the Production Panel Meter requires no software to install to program the functionality of the meter. Remote setup and monitoring of production data is as simple as opening a WEB browser and entering the IP address of the meter. The Production Panel Meter has four selectable digital inputs to provide the source for the 35+ production variables. You can select such variables as Counts, % Complete, Pace, Cycle Times, % of Target, Downtime, and OEE to display, monitor, and collect. These production variables are built into the product requiring no code to program or formulas to write. This real time production data can also be collected by 3rd party spreadsheets. Production goals reached, machine performance monitored, and plant floor production data collected are all benefits of the Production Panel Meter. Network your plant equipment and measure your **OEE (Overall Equipment Effectiveness)** today by installing the Production Panel Meter. No Software, No Programming, No Ethernet Cards

### PRODUCT FEATURES

- **NO SOFTWARE TO INSTALL!** Web based setup
- Integrated production monitoring solution
- Selection of 35+ data source input variables
- Monitor production data through web browser
- Collect real time data over ethernet
- Store production data to 3rd party spreadsheets
- Built in Modbus TCP server
- Programmable break and downtime scheduler
- Machine state text and override messages

### PRODUCT SPECIFICATIONS

- 1/8 DIN panel size, Nema 12
- 2 line x 16 character vacuum fluorescent display
- 2 line x 16 character liquid crystal display
- 1 line x 6 digit tri-color LED display
- 4 programmable PNP inputs
- 1 programmable SSR 1 amp output
- 10/100 ethernet communication port
- Operating temperature 0-55 C
- 24 VDC power requirement

**OEE = Availability x Performance x Quality**

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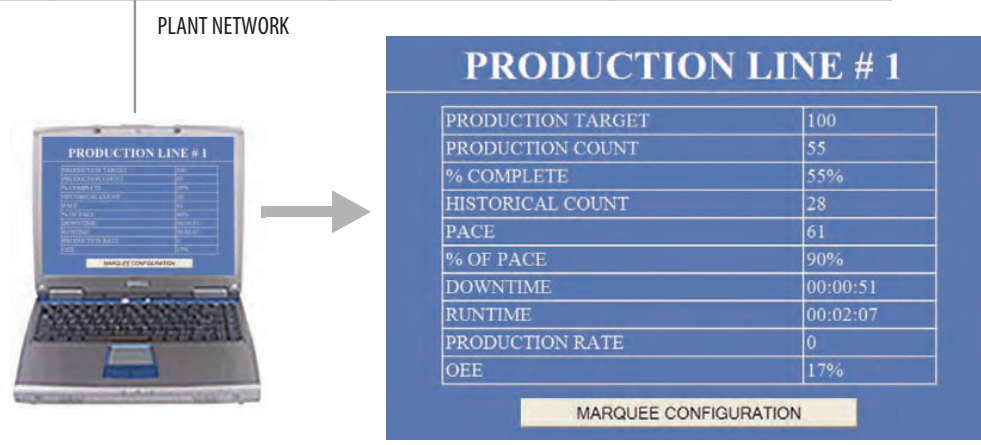
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**SOFTWARE**

Display, Monitor, and Collect Production Data without Installing any Software



- DATA SOURCE**
- GOAL
  - TOTAL COUNT
  - BAD COUNT
  - GOAL
  - GOAL-COUNT
  - % BAD
  - % COMPLETE
  - TARGET COUNTER
  - % OF TARGET COUNTER
  - HISTORICAL COUNT
  - DOWNTIME
  - RUN TIME
  - SETUP TIME
  - USER MODE TIME
  - HISTORICAL DOWNTIME
  - CURRENT CYCLE TIME
  - LAST CYCLE TIME
  - SHORTEST CYCLE TIME
  - LONGEST CYCLE TIME
  - AVERAGE CYCLE TIME
  - RATE / PER SECOND
  - RATE / PER MINUTE
  - RATE / PER HOUR
  - Takt TIME ELAPSED
  - Takt TIME REMAINING
  - QUALITY
  - MACHINE AVAILABILITY
  - MACHINE PERFORMANCE
  - OEE
  - MACHINE STATE
  - MODBUS/TCP reg. 40131

**Production Data Variables**

**"No Code to Program"**

**"No Formulas to Write"**

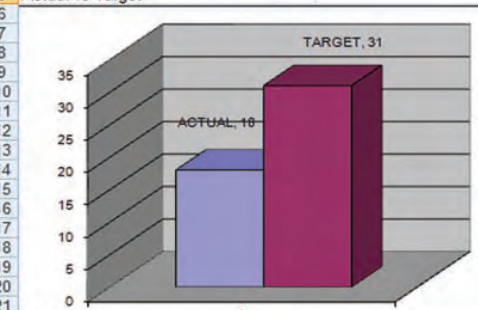
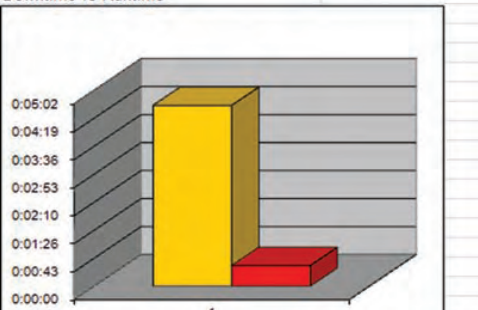
**PRODUCTION LINE # 1**

PRODUCTION TARGET	100
PRODUCTION COUNT	55
% COMPLETE	55%
HISTORICAL COUNT	28
PACE	61
% OF PACE	90%
DOWNTIME	00:00:51
RUNTIME	00:02:07
PRODUCTION RATE	0
OEE	17%

MARQUEE CONFIGURATION

	A	B	C	D	E	F	G	H	I	J	K	L
1	Production Line # 1											
2	TIME	DATE	GOAL	ACTUAL	TARGET	% OF TARGET	% COMPLETE	RUN TIME	DOWNTIME	CYCLE TIME	OEE	STATE
3	3:15:54 PM	05/30/08	100	18	15	120%	18%	0:01:54	0:00:32	11:09	78%	RUN
4	3:16:09 PM	05/30/08	100	18	16	112%	18%	0:02:08	0:00:32	26:02	80%	RUN
5	3:16:09 PM	05/30/08	100	18	16	112%	18%	0:02:09	0:00:32	26:66	80%	RUN
6	3:16:24 PM	05/30/08	100	18	18	100%	18%	0:02:24	0:00:32	41:14	81%	RUN
7	3:16:24 PM	05/30/08	100	18	18	100%	18%	0:02:24	0:00:32	41:14	81%	RUN
8	3:16:39 PM	05/30/08	100	18	19	94%	18%	0:02:38	0:00:32	55:71	78%	RUN
9	3:16:39 PM	05/30/08	100	18	19	94%	18%	0:02:39	0:00:32	56:34	78%	RUN
10	3:16:54 PM	05/30/08	100	18	21	85%	18%	0:02:53	0:00:32	70:82	71%	RUN
11	3:16:55 PM	05/30/08	100	18	21	85%	18%	0:02:54	0:00:32	71:99	71%	RUN
12	3:17:08 PM	05/30/08	100	18	22	81%	18%	0:03:07	0:00:32	85:24	68%	RUN
13	3:17:09 PM	05/30/08	100	18	22	81%	18%	0:03:08	0:00:32	86:4	68%	RUN
14	3:17:23 PM	05/30/08	100	18	24	75%	18%	0:03:22	0:00:32	100:37	64%	RUN
15												

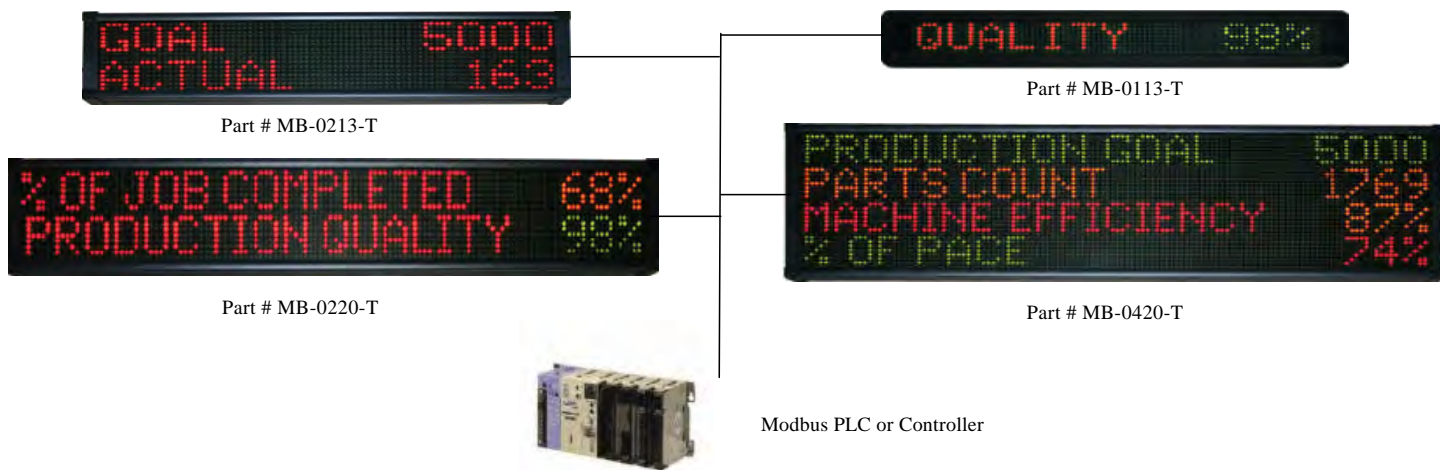
	A	B	C	D
1	Production Line # 1		STATE	RUN
2				
3	PRODUCTION GOAL		100	ACTUAL PRODUCTION
4				18
5	Actual vs Target		Downtime vs Runtime	
6				

Production Data Collected and Analyzed with 3rd Party Spreadsheet

PART NUMBER MODEL	DISPLAY TYPE	DIMENSIONS (W x H x D)
PPM-0106-LED (1 line, 6 digit)	Tri-Color LED	96mm x 48mm x 125mm
PPM-0216-LCD (2 line, 16 character)	Liquid Crystal	96mm x 48mm x 125mm
PPM-0216-VF (2 line, 16 character)	Vacuum Fluorescent	96mm x 48mm x 125mm



## Modbus MARQUEE SERIES (Modbus TCP )



### PRODUCT DESCRIPTION

The Modbus Marquee revolutionizes the industrial market on how a marquee sign should connect and communicate on the Modbus network. The Modbus Marquee has a built in WEB server, eliminating the need to install software to program the marquee sign. Setup of the display is as simple as opening a WEB browser on your computer and entering the IP address of the marquee sign. With its fully integrated package, the Modbus Marquee allows the user to configure and broadcast plc data and message information without programming communication blocks within the ladder logic code of the plc. The product's innovation allows the user to set up the functionality of the marquee sign and simply connect to a Modicon PLC. The messages displayed on the marquee can be alarms, machine performance, or production data. These messages are selected and displayed through internal registers from the PLC. The format of these registers can be any combination of bits, words, or strings. The Modbus Marquee has an additional ethernet port built into the marquee sign. This second port gives the marquee the flexibility to broadcast information to any computer on the plant network through the web server. This computer can monitor production data and collect real time information from the plant floor by simply entering the IP address of the marquee. Also, third party spreadsheets can be used to monitor and store the information broadcasted by the marquee sign. With no software to install, the Modbus Marquee stands alone as the new innovative way for a marquee sign to communicate on the Modbus network.

### PRODUCT FEATURES

- **NO SOFTWARE to INSTALL !!!** Web based setup
- Modbus TCP protocol
- Direct register access to plc from marquee sign
- 2nd ethernet port for data collection to PC
- Monitor plc registers through built-in web browser
- Broadcast alarm messages from the PLC
- Backup and restore configuration of marquee sign
- Collection of real time data from plant floor

### PRODUCT SPECIFICATIONS

- 1, 2 and 4 line alphanumeric display
- 13 and 20 character width
- Bright tri-color LED characters
- Operating temperature 0-55 C
- 100,000 hour rated LED life
- Metal housing
- IR programming port
- Mounting hardware included

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Upon entering the IP address of the marquee sign from the web browser, the monitor page is displayed. This web page is where user configured process values and variable data can be viewed.

## FACTORYplc MARQUEE MONITOR PAGE

PRODUCTION GOAL	5392
PRODUCTION COUNT	3930
DOWNTIME	0
MACHINE EFFICIENCY - OEE	0.0
% COMPLETE	0.0
HISTORICAL PRODUCTION COUNT	0
HISTORICAL DOWNTIME	0
VARIABLE DATA 7	0
VARIABLE DATA 8	0
VARIABLE DATA 9	0

Apply Changes

MARQUEE CONFIGURATION

With proper authorization, the user can enter into the marquee sign setup menu. This web page is where the user has access to the marquee configuration pages used to set up the marquee sign.



By selecting the “Edit Marquee Messages” button, the user can set up the message text, font size, color, and functionality of the message to be displayed on the marquee sign.

## MESSAGE EDIT PAGE

MSG #	MSG TEXT	FONT	LINE	COLOR	FLASH	MINIMUM DISPLAY TIME
1	OPERATION COMPLETE - INSERT NEW PART	2"	LINE 1	VD 0	■	2 SEC
2	CALL MAINTENANCE !!!!!	4"	LINE 1	RED	■	10 SEC
3	JOB COMPLETED, BATCH COUNT REACHED	2"	LINE 1	VD 1	■	2 SEC
4	TEMPERATURE NORMAL	2"	LINE 1	GREEN	■	2 SEC
5	CONVEYOR STOPPED	2"	LINE 1	YELLOW	■	2 SEC
6	PART JAMMED - RESET MACHINE	2"	LINE 1	RED	■	2 SEC
7	SAFETY MEETING 2:00 P.M.	2"	LINE 2	GREEN	■	30 SEC
8	ASSEMBLY STAGE 3	2"	LINE 1	GREEN	■	2 SEC
9	E-STOP PUSHED - PROCESS STOPPED	2"	LINE 2	RED	■	5 SEC
10	CRITICAL ALARM - PROCESS HALTED	2"	LINE 2	RED	■	5 SEC

APPLY CHANGES

MESSAGES 11-20

MESSAGES 21-30

MESSAGES 31-40

MESSAGES 41-50

MESSAGES 51-60

MESSAGES 61-70

MESSAGES 71-80

MESSAGES 81-90

MESSAGES 91-100

MARQUEE SETUP MENU

By selecting the “Variable Data Configuration” button, the user can set up the variable data from the plc to be displayed on the marquee sign. The format of the variable data is entered here.

## VARIABLE DATA CONFIGURATION

MAIN PAGE TITLE : FACTORYplc MARQUEE MONITOR PAGE

### MONITOR PAGE CONFIGURATION

DATA	DATA DESCRIPTION	# DIGITS	PRECISION	FORMAT	JUSTIFY	COLOR	MONITOR DISPLAY
0	PRODUCTION GOAL	5	0	LEADING SPACES	RIGHT	RED	■
1	PRODUCTION COUNT	5	0	LEADING SPACES	RIGHT	GREEN	■
2	DOWNTIME	5	0	LEADING SPACES	RIGHT	GREEN	■
3	MACHINE EFFICIENCY - OEE	3	1	LEADING SPACES	RIGHT	YELLOW	■
4	% COMPLETE	3	1	LEADING SPACES	RIGHT	FLASH RED	■
5	HISTORICAL PRODUCTION COUNT	5	0	LEADING SPACES	RIGHT	FLASH GREEN	■
6	HISTORICAL DOWNTIME	5	0	LEADING SPACES	RIGHT	FLASH YELLOW	■
7	VARIABLE DATA 7	5	0	LEADING SPACES	RIGHT	RED	■
8	VARIABLE DATA 8	5	0	LEADING SPACES	RIGHT	RED	■
9	VARIABLE DATA 9	5	0	LEADING SPACES	RIGHT	RED	■

Apply Changes

RETURN TO SETUP MENU

PART NUMBER MODEL

DIMENSIONS (HxWxD)

WEIGHT

MB-0113-T (1 line, 13 character, tricolor)

4.5" x 26.0" x 3.75"

2.8 LBS.

MB-0213-T (2 line, 13 character, tricolor)

6.25" x 25.5" x 3.75"

10.8 LBS.

MB-0220-T (2 line, 20 character, tricolor)

6.25" x 39.75" x 3.75"

17.9 LBS.

MB-0420-T (4 line, 20 character, tricolor)

11.0" x 39.75" x 3.75"

26.2 LBS.

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