

ME6008M1 Manual Batching Docket Printer Driver Unit

FEATURES

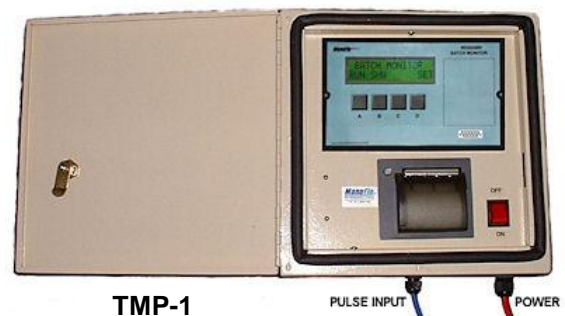
- Prints QA batch dockets automatically (programmable delay), or manually.
- Monitors 1 channel of product.
- Accepts NPN or contact closure pulse input.
- Channel units in millilitres or Litres.
- Records and prints Batch number ID, time and date.
- Internally logs 500 batch events, downloadable to your laptop/PC via optional front-access DB9 RS232 connector (that also comes with a RS232-to-USB adapter).
- Grand Totals and batch history can also be dumped to a PC on demand.
- Real time clock.
- User-friendly menu tree.
- Programmable pulse scaling (K-Factor), and number of docket copies
- IP65-rated touchpad.



The Manu Electronics ME6008M1 will provide automatic end-of-batch printing, and will data log 500 batch events. All records are time-stamped from the unit's Real Time Clock.

The unit is operated from a front panel keypad with a LCD 2-line display. Selections are made from a four-function "soft-key" tree structured menu.

The unit is intended to operate as part of ManuFlo's TMP-1 Manual Batching Docket Printer System (see <http://www.manuelectronics.com.au/pdfs/TMP-1.pdf>).



SAMPLE PRINTOUTS



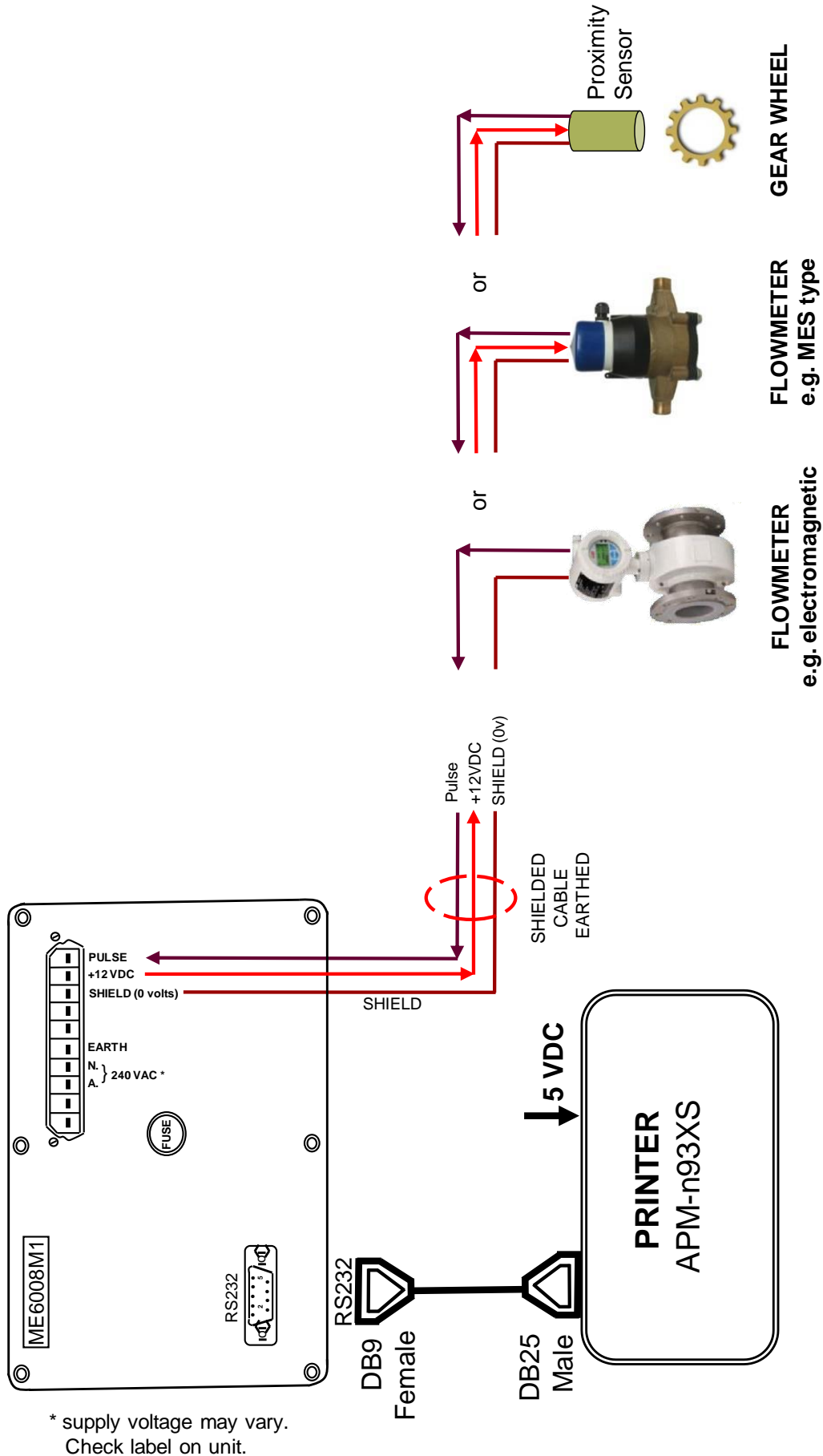
Batch Docket (from Printer)



	DATE	TIME	
B-0282	02/07/13	10:15	000082 L
B-0281	02/07/13	10:14	000114 L
B-0280	02/07/13	10:13	000859 L
B-0279	28/06/13	13:28	000182 L
B-0278	28/06/13	13:25	000109 L
B-0277	28/06/13	13:17	000103 L

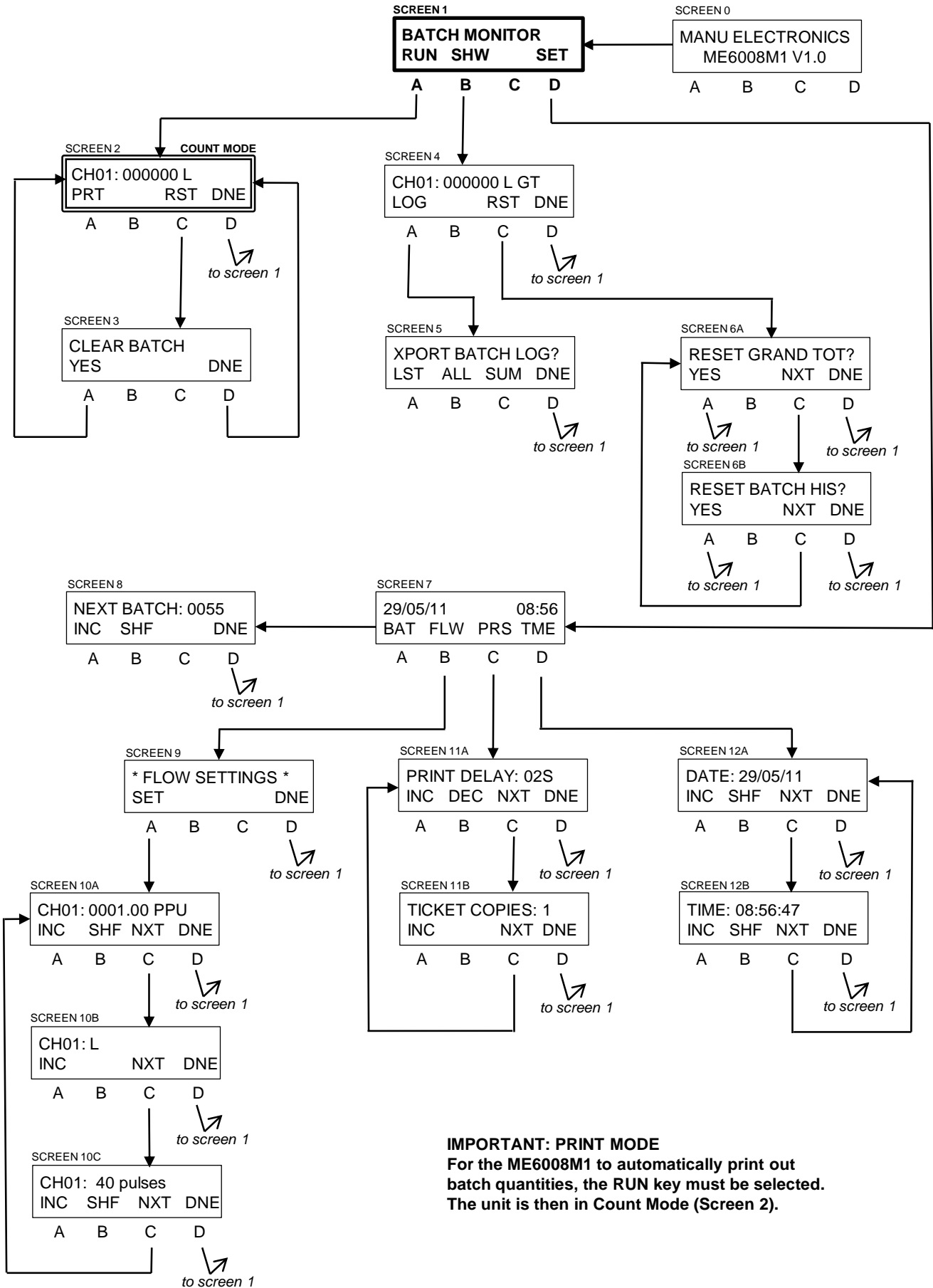
Batch Log (via computer)

ME6008M1 CONNECTION DIAGRAM - TO PULSE SOURCES



* supply voltage may vary.
Check label on unit.

ME6008M1 MENU TREE



IMPORTANT: PRINT MODE
 For the ME6008M1 to automatically print out batch quantities, the RUN key must be selected. The unit is then in Count Mode (Screen 2).

OPERATING INSTRUCTIONS

SCREEN 0: POWER-ON SCREEN.

- LASTS APPROXIMATELY 3 SECONDS. GIVES CURRENT FIRMWARE VERSION.

SCREEN 1: MAIN MENU

- PRESS RUN TO ENABLE COUNTING TO COMMENCE.
- PRESS SHW TO DISPLAY THE CURRENT GRAND TOTAL.
- PRESS SET TO CONFIGURE THE BATCH MONITOR.

IMPORTANT: For the ME6008M1 to automatically print out batch quantities, the RUN key must be selected. The unit is then in Count Mode

SCREEN 2: COUNT MODE

- PRESS PRT TO PRINT THE CURRENT BATCH DATA.
- PRESS RST TO CLEAR THE CURRENT BATCH DATA.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 3: CLEAR BATCH

- PRESS YES TO CLEAR THE CURRENT BATCH DATA ONLY.
- PRESS DNE TO RETURN TO THE PREVIOUS SCREEN (SCREEN 2).

SCREEN 4: SHOW CURRENT GRAND TOTAL

- PRESS LOG TO EXPORT BATCH LOG.
- PRESS RST TO CLEAR EITHER THE GRAND TOTAL OR BATCH HISTORY.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 5: EXPORT BATCH LOG (Optional Front Port must be connected to PC/laptop)

- PRESS LST TO PRINT THE LAST BATCH RECORDED
- PRESS ALL TO PRINT THE TOTAL BATCH HISTORY RECORDED.
- PRESS SUM TO PRINT THE GRAND TOTAL.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 6A: RESET GRAND TOTAL

- PRESS YES TO RESET THE GRAND TOTAL.
- PRESS NXT TO RESET THE BATCH HISTORY.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 6B: RESET BATCH HISTORY

- PRESS YES TO RESET THE BATCH HISTORY.
- PRESS NXT TO RESET THE GRAND TOTAL.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 7: CONFIGURE THE BATCH MONITOR

- PRESS BAT TO ENTER THE NEXT BATCH NUMBER REQUIRED.
- PRESS FLW TO ENTER THE K FACTOR.
- PRESS PRS TO ENTER THE PRINT DELAY OR NUMBER OF TICKET COPIES.
- PRESS TME TO ENTER THE DATE OR TIME.

SCREEN 8: ENTER NEXT BATCH NUMBER

- THE UNDERSCORE INDICATES WHICH DIGIT IS CURRENTLY SELECTED.
- PRESS INC TO INCREMENT THE DIGIT CURRENTLY SELECTED.
- PRESS SHF TO MOVE THE UNDERSCORE TO THE NEXT DIGIT.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 9: CHANGE FLOW SETTINGS (OR K-FACTOR)

- PRESS SET TO SET THE K-FACTOR (see Table 2 on Page 6).
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 10A: ENTER THE K-FACTOR (PULSES/UNIT)

- THE UNDERSCORE INDICATES WHICH DIGIT IS CURRENTLY SELECTED.
- PRESS INC TO INCREMENT THE DIGIT CURRENTLY SELECTED.
- PRESS SHF TO MOVE THE UNDERSCORE TO THE NEXT DIGIT.
- PRESS NXT TO SELECT CHANNEL UNIT (L or mL).
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 10B: ENTER THE UNIT

- PRESS INC TO SELECT L (Litres) or mL (milliliters).
- PRESS NXT TO SET THE PULSE THRESHOLD.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 10C: PULSE THRESHOLD BEFORE PRINTING A BATCH (default is 40 pulses)

- PRESS INC TO INCREMENT THE DIGIT CURRENTLY SELECTED.
- PRESS SHF TO MOVE THE UNDERSCORE TO THE NEXT DIGIT.
- PRESS NXT TO GO TO SCREEN 10A.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 11A: ENTER THE PRINT DELAY

- THE PRINT DELAY IS THE TIME OF INACTIVITY THAT INDICATES THE END OF A BATCH.
- IT CAN BE SET FROM 2 TO 99 SECONDS.
- PRESS INC TO INCREMENT THE DELAY VALUE.
- PRESS DEC TO DECREMENT THE DELAY VALUE.
- PRESS NXT TO ENTER THE NUMBER OF BATCH TICKET COPIES.
- PRESS DNE TO RETURN TO SCREEN 1.

SCREEN 11B: ENTER THE NUMBER OF BATCH TICKET COPIES

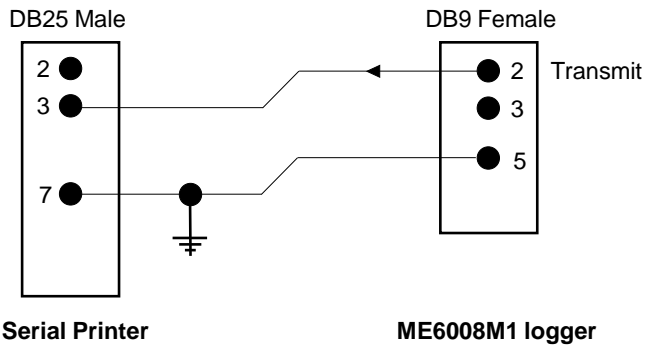
- PRESS INC TO INCREMENT THE VALUE (will cycle 0-9)
- PRESS NXT TO RETURN TO SCREEN 11A.
- PRESS DNE TO RETURN TO SCREEN 1

SCREEN 12A: ENTER THE DATE

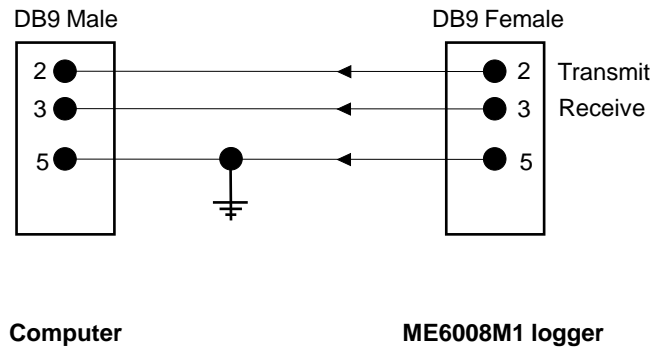
- THE UNDERSCORE INDICATES WHICH DIGIT IS CURRENTLY SELECTED.
- PRESS INC TO INCREMENT THE DIGIT CURRENTLY SELECTED.
- PRESS SHF TO MOVE THE UNDERSCORE TO THE NEXT DIGIT.
- PRESS NXT TO ENABLE A CHANGE OF THE TIME.
- PRESS DNE TO SAVE DATE CHANGES AND RETURN TO SCREEN 1.

SCREEN 12B: ENTER THE TIME

- THE UNDERSCORE INDICATES WHICH DIGIT IS CURRENTLY SELECTED.
- PRESS INC TO INCREMENT THE DIGIT CURRENTLY SELECTED.
- PRESS SHF TO MOVE THE UNDERSCORE TO THE NEXT DIGIT.
- PRESS NXT TO ENABLE A CHANGE OF THE DATE.
- PRESS DNE TO SAVE TIME CHANGES AND RETURN TO SCREEN 1.



RS232 Communication Cable
ME6008M1 to Printer
(via back serial port)



RS232 Communication Cable
ME6008M1 to Computer
(usually via ME6008M1's front serial port but can use the
back serial port after disconnecting printer)

The serial port of the attached printer
(or PC terminal)
must be set to the following:

Baud rate	9600
data bits	8
stop bit	1
parity	none

Table 1: Printer Serial Port Settings

Flowmeter	Pulses/Litre	ME6008M1 Pulses Per Unit setting	
		to print Litres	to print mls
RPFS-P (25mm)	75	0075.00	0000.08
RPFS-P (32mm)	46	0046.00	0000.05
RPFS-P (40mm)	30	0030.00	0000.03
RPFS-P (50mm)	20	0020.00	0000.02
MES20	1000	1000	0001.00
MES25	555	0555.00	0000.56
any	1	0001.00	do not use
any	0.1	0000.10	do not use

Table 2: Pulses Per Unit settings

Notes:

- To avoid possible noise causing bad records, there is a default threshold of 40 pulses before a batch is logged.

To Read Batch Log via a Personal Computer (PC), using the PC serial port:

To read the entire batch log via a PC:

- connect a communications cable (see page 6) between the ME6008M1 serial port and the PC's port (using the serial to USB adapter if necessary).
- start HyperTerminal software on the PC. HyperTerminal is supplied as a part of Windows up to Windows XP, or can be downloaded from the Internet, at sites such as:
<http://www.hilgraeve.com/hyperterminal-trial/> , <http://hyperterminal-private-edition.findmysoft.com/> ,
http://download.cnet.com/HyperTerminal-Private-Edition/3000-2155_4-10966768.html
- ensure the PC's serial port settings are as described page 6.
- ensure printer is switched off to avoid the event log also printing out on the printer.

On the ME6008M1, go to Screen 5 "XPORT BATCH LOG?" (see page 4) and press ALL, and the ME6008M1 will dump the batch log to the PC.

TECHNICAL SPECIFICATIONS - ME6008M1 Printer Driver Unit

Power supply options	240 vac, 110 vac, 12-24 VDC
Voltage output	+12VDC (to flowmeter, if no Batch Controller)
Input Channel	<ul style="list-style-type: none"> • 1 Channel. Will connect to ManuFlo RPFS-P paddlewheel sensor, NAMUR sensor or electromagnetic flowmeter. • Sinking pulse (connect between Pulse and 0v). NPN input.
Input - max. frequency	1.5 kHz
Memory	500 batches (circular buffer)
Communications port	<ul style="list-style-type: none"> • RS232 Serial DB9, 9600 baud. • Optional front port, with RS232 to USB adapter.
Display	LCD 2-line 16-character LCD display, with backlight
Keypad	Membrane over back switch
Connector Inputs	10-pin Weidmuller plug and socket
Operating current	150 mA
Power consumption	36 W
Max. operating temperature	50 °C
Mounting	Panel mount
Instrument housing	ABS hi-impact case mould. IP65 front face
Dimensions (mm)	206 L, 130 H, 90 D
Cutout (mm)	190 L, 122 H
Weight	1 kg

ORDER CODES

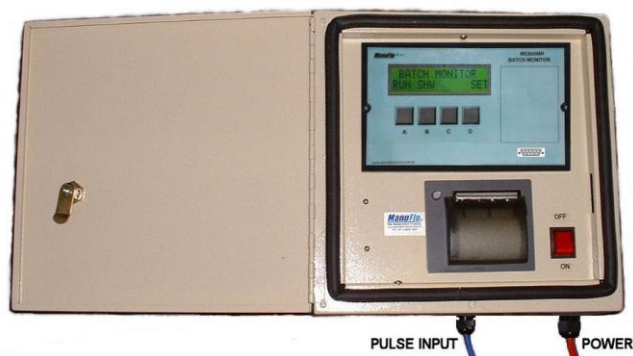
Order Code	Description
ME6008M1	1-channel Batch Monitor Printer Driver Unit, 240 vac powered
ME6008M1-110	1-channel Batch Monitor Printer Driver Unit, 110 vac powered
ME6008M1-DC	1-channel Batch Monitor Printer Driver Unit, 12-24 VDC powered
-FP	RS232 port on front of ME6008M1 (includes RS232 to USB converter cable), in addition to the RS232 port at the back of ME6008M1, for easy access to download data to laptop.

Due to continuous product improvement, specifications are subject to change without notice

TMP-1 Manual Batching Docket Printer System (single channel)

FEATURES

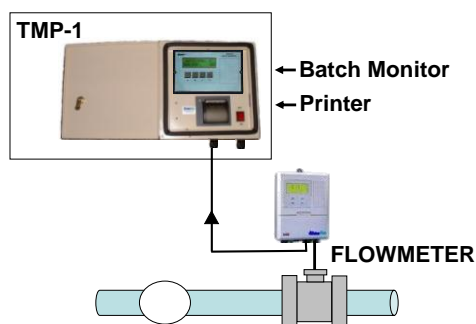
- Printer for automatic ticketing.
- Ideal for delivery trucks or loading and discharge locations where custody transfer docket is required.
- Prints Batch ID, quantity, time and date.
- Optional front port, for downloading internal log of 500 batches.
- Paper easily changed.
- Rugged IP64 hinged enclosure, with key lock.
- contains wired and mounted ME6008M1 single channel Batch Monitor Printer Driver Unit and APM-n93XS printer.
- enclosure: 300 L x 300 H x 200 D mm.



The TMP-1 unit is prewired, and consists of:

- 1 ME6008M1 1-channel Batch Monitor Printer Driver Unit
- 1 APM-n93XS Ticket printer and power supply (ac or DC)
- 1 Metal powder-coated box to IP64, with key lock
- 1 Paper Roll

× BATCH DISPENSED ×
B0035 29/06/09 14:35
00000020 L



The TMP-1 receives pulses from flowmeter.



Ideal for delivery trucks or loading and discharge locations where a custody transfer docket is required.

The TMP-1 is wired to a pulse output flowmeter (e.g. ManuFlo PMS50 ProcessMaster). Note that all flowmeters require a full pipe when measuring, so ideally the flowmeter should have a riser after it to keep the pipe full.

The TMP-1's component instruments are housed and protected in a rugged metal box, with a hinged key-lock lid. Since the enclosure is sealed to IP64, the unit can be mounted to the exterior chassis of delivery trucks. The monitor and printer are prewired, making it simple to connect your power supply and flowmeter pulses to the unit.

At the end of each manual batch, the TMP-1 (after a settable period of wait time after there is no activity) automatically provides batch quantity printout with date, time and Batch ID - ideal for delivery trucks or loading and discharge locations where a custody transfer docket is required. The printing of double dockets is optional, selectable via the menu.

Order Code	Description	Weight (unpacked)
TMP-1-DC	Manual Batching Docket Printer System, 12-24 VDC powered	9.5 kg
TMP-1-AC	Manual Batching Docket Printer System, 240 vac powered	9.5 kg
-FP	Optional front serial port, so the internal log of 500 batches can be downloaded to a laptop.	

TMP-1 INSTALLATION INSTRUCTIONS

- 1 Select a mounting location that is easily accessible, and that avoids excessive vibration i.e. mount away from pumps; use rubber dampeners to help buffer against vibrations.
- 2 According to the marked cable ends:
 - connect to pulse source (e.g. flowmeter); and
 - connect to power. Measure that the voltage being received at the TMP-1 is within the required voltage range e.g. 12-24 VDC for a DC unit. The maximum current draw of the system is 2.2 Amps.
- 3 Switch the TMP-1 unit on, using the **rocker switch**.

ME6008M1 Batch Monitor



Optional **front serial port** to download internal batch log to a laptop.

Printer LED

- The Printer LED will illuminate; and
- The Batch Monitor LCD screen will display:

MANU ELECTRONICS

ME6008M1 Vx.x

(where "x.x" is a version number)

- 4 Although the ME6008M1 parameters are factory set, make sure:
 - the real time clock is set to local time and date;
 - the Batch ID is set to the required initial value;
 - the Calibration Input is set to the correct pulses/Litre value according to the specification of the attached flowmeter (see the ME6008M1 datasheet for details on how to enter Programme Mode to examine or change settings).

Ensure the printer is loaded with paper (see the printer manual).
- 5 The TMP-1 unit is now ready to monitor and log batching, and for the automatic printing of batch tickets. If mounted on a truck and batching for prolonged periods, the truck must be running, to keep the truck battery charged. When not in use, power to the TMP-1 should be switched off. Note that electromagnetic flowmeters draw significant current, so if these are used then they should also be switched off as part of the same circuit (not necessary for conventional flowmeter types).
- 6 If the optional front serial port is fitted, then the internal log of the last 500 batches can be downloaded to a laptop. For download instructions, see the separate document at the ManuFlo website: http://www.manuelectronics.com.au/pdfs/ME6008M1_Log_DLoad.pdf

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