**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 TTP-A5 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
2. TTP-A5 Ticket printer and power supply (ac or DC)
3. Metal powder-coated box to IP64, with key lock
4. Paper Roll

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.

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

1. Select a mounting location that is easily accessible. **WARNING:** To keep warranty valid, avoid 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 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**.

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).

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 switch 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
WIRING FOR DC-POWERED TMP-1 SYSTEM

WARNING
Must avoid excessive vibration i.e. mount away from pumps; use rubber dampeners to help buffer against vibrations.

Note: liquid flow is controlled manually by the operator.

TMP-1-DC
12-24 VDC powered

24 VDC Supply / Battery

+24 VDC

Optional 12 to 24VDC step-up converter for 12 VDC supply/battery

12 to 24 VDC Step-Up Converter*

12 VDC Battery

+12 VDC

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+  --

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white = pulse

shield = 0v

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switch

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+  --

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+  --

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+  --

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WIRING FOR AC-POWERED TMP-1 SYSTEM

Note: liquid flow is controlled manually by the operator

**WARNING**
Must avoid excessive vibration i.e. mount away from pumps; use rubber dampeners to help buffer against vibrations.

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