The MCN-1 Aids to Navigation Monitor is Tideland’s unique approach to create a multi-purpose remote monitor and control device to suit most NavAid installations using a simple small screwdriver.

Designed to satisfy the majority of customer needs and requires no computers or programmers. No technical experience of Tideland products are required to setup most installations, furthermore Tideland lantern types are automatically detected during power-up making installation a quick and easy task.

The MCN-1 product is an advanced replacement for existing Tideland NA-1 units, yet flexible enough to monitor NavAids used on offshore platforms, lighthouses and buoys.

**FEATURES**

**4-Position Switch**
- Position #1 selects display format. OFF = Raw value display (NA-1 type). ON = Interpreted values (MC-1 type).
- Position #2 selects 12VDC or 24VDC input nominal power.
- Position #3 acknowledges the presence of fog signals if used.
- Position #4 selects monitored output relay function. OFF = energized on fail. ON = Failsafe, energized when normal.

**16-Position Switch**
- Positions 0 to 7, allows operator to set the quantity of monitored lanterns (1 to 8).
- Position 8 for fog signal with no lanterns.
- Position 9 to F, allows operator to monitor 1 to 8 Tideland lanterns with a SyncMaster installed.

**OUTPUT RELAYS**

**Lantern Status**
- Four contacts report last lamp status of up to eight lanterns. Each contact provides the status of two lanterns.
- One contact to report one or more lantern failures.
- One contact indicates low lantern battery voltage.

**Fog Signal Status**
- One contact to indicate a fog signal failure.
- One contact indicates low battery voltage.
## Technical Details

### Communication Channels
- RS-232: 2 channels
- ASCII Sync: 2 channels
- RS-485: 1 channel

### Analog Inputs
- Four (4): 0 to 40VDC, 10-bit resolution; input impedance – 100k ohms

### Digital Inputs
- Four (4): 0 to 40VDC (0 to 25VAC); input impedance – 5k ohms

### Digital Outputs
- Switched 5V DC power

### Power
- Input Voltage: 9 to 36VDC
- Input Power: 0.6W max

### Operating Temperature
- -40° C to +70° C

### Stainless Steel Enclosure
- Mechanical Protection: 316 stainless steel, NEMA 4x
  - IP65

### Dimensions

<table>
<thead>
<tr>
<th>Variant 1</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>320mm (12.6in)</td>
<td>280mm (10.9in)</td>
<td>140mm (5.5in)</td>
<td>8kg (17.6lb)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variant 2</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>360mm (14.0in)</td>
<td>410mm (16.0in)</td>
<td>160mm (6.2in)</td>
<td>13kg (28.7lb)</td>
</tr>
</tbody>
</table>

**NOTE:** Specifications are subject to change.