# Fluid Pressure Monitor (FPM100)

- Monitor Up to Six Pressure/Vacuum Channels
- Uses Industry Standard 4-20mA Sensors
- Output Channels are Short Circuit Protected
- Sensors Powered Directly from NMEA 2000® Network
- Configurable for Fluid Pressure and Vacuum
- Many Applications – Water Pressure, Hydraulic Pressure, Pump Suction or Vacuum (Clogged Filters)
- Configurable for Tank Level Monitoring
- 11 Accessory Probes (Pressure/Vacuum Transducers)


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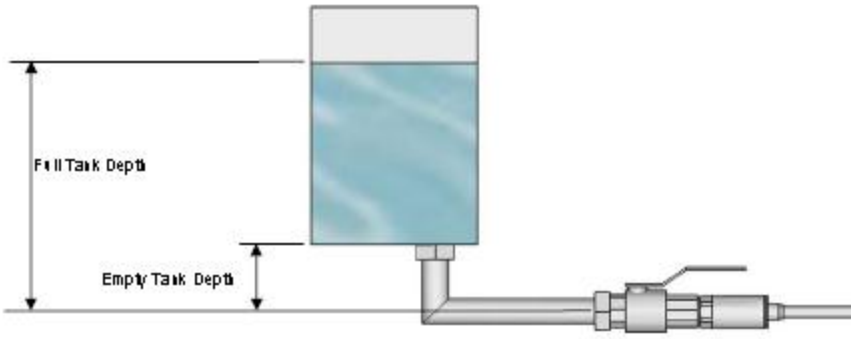
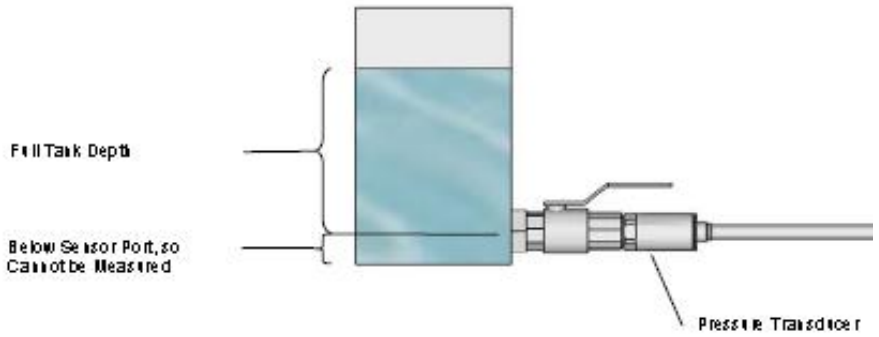
# FPM100 Accessories/Installation Examples

| Part # | FPM100 Accessory | MSRP |
|---|---|---|
| PT-0-3PSI-01 | Pressure Transducer 0 to 3 PSI | $ 149.00 |
| PT-0-5PSI-01 | Pressure Transducer 0 to 5 PSI | $ 149.00 |
| PT-0-10PSI-01 | Pressure Transducer 0 to 10 PSI | $ 149.00 |
| PT-0-50PSI-01 | Pressure Transducer 0 to 50 PSI | $ 149.00 |
| PT-0-100PSI-01 | Pressure Transducer 0 to 100 PSI | $ 149.00 |
| PT-0-300PSI-01 | Pressure Transducer 0 to 300 PSI | $ 149.00 |
| PT-0-500PSI-01 | Pressure Transducer 0 to 500 PSI | $ 149.00 |
| PT-0-1000PSI-01 | Pressure Transducer 0 to 1000 PSI | $ 149.00 |
| PT-0-3000PSI-01 | Pressure Transducer 0 to 3000 PSI | $ 149.00 |
| PT-0-5000PSI-01 | Pressure Transducer 0 to 5000 PSI | $ 149.00 |
| PT-SNUB-01 | Pressure Snubber | $ 62.00 |
| PT-V-0-1BAR-01 | Pressure Transducer Vacuum to 1 Bar | $ 199.00 |

Pressure Transducer

Pressure Snubber

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# Tank Level Monitor TLM100

- Ultrasonic Tank Sender with NMEA 2000® Interface
- All Fluid Types Except Gasoline
- 1/8” Depth Accuracy (-25°C to 55°C)
- Up to 40” Depth Tanks
- 2” Dead Band (2” Air Gap Required Between Sender and Fluid)
- Can be Calibrated for Irregular Shaped Tanks
- 16 Point Calibration
- Supports All Tank Types
  - ✓ Fuel, Fresh Water, Waste Water, Live Well, etc
- Non-Displacement Hulls Require Focus Tubes
- Empty Tanks Require Flat bottom

TLM100 Tank Level Monitor (40” Depth)

Maretron's TLM100 is used to sense fluid levels of tanks by using ultrasonic technology. Ultrasonic, or sound waves, are transmitted via the TLM100 mounted at the top of the tank and the flight times of the sound waves to and from the fluid are measured much like a depth sensor. What this means for you is that there are no difficult to handle long probes protruding into the tank, which often foul and/or corrode. Once the TLM100 calculates and transmits the fluid level over the NMEA 2000® network, you can observe tank levels anywhere on the vessel where there is an NMEA 2000® compatible display such as the Maretron DSM250.

The TLM100 is capable of sensing fluid levels in tanks up to 40" (1.02m) in depth. It can be used for diesel, fresh water, waste water, black water, and oil tanks (see TLM150 for gasoline tanks or TLM200 for deeper tanks). Unlike most tank senders that only work with rectangular tanks, the TLM100 can be calibrated for irregular tank shapes so you can know the true fluid level in your tanks.

The TLM100 is mounted directly to the top of tanks using the industry standard SAE J1810 5-hole mounting pattern.

The TLM100 can also be mounted to tanks with threaded tank openings using optional adapters that included both a 1.5" NPT and a 1.25" BSP adapter. There are other important TLM100 optional accessories including an airlock for black water applications, which keeps the face of the ultrasonic transmitter from fouling and an optional focus tube to permit use on boats with planing hulls, which is required if the vessel spends a significant amount of time with the bow pitched up.

Most importantly, the TLM100 is NMEA 2000® certified so you can view any and all tank levels anywhere on the vessel when using a compatible NMEA 2000® display. The TLM100 is another key component of Maretron's N2KView® vessel monitoring and control system.

Products

| PART NUMBER | DESCRIPTION |
|---|---|
| TLM100-01 | Tank Level Monitor (40' Depth Tanks) |
| TA-6H-1.25BSP | 1.25" BSP Displacement Hull Tank Adapter |
| TA-6H-1.5NPT | 1.5" NPT Displacement Hull Tank Adapter |
| TAL-6H | SAE 5-Bolt Pattern Black Water Airlock |
| TAL-1.25BSP | 1.25" BSP Black Water Airlock |
| TAL-1.5NPT | 1.5" NPT Black Water Airlock |
| TFT-6H | SAE 5-Bolt Pattern Non-Displacement Hull Focus Tube |
| TFT-1.25BSP | 1.25" BSP Non-Displacement Hull Focus Tube |
| TFT-1.5NPT | 1.5" NPT Non-Displacement Hull Focus Tube |

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# Tank Level Monitor TLM150

- **Ultrasonic Tank Sender with NMEA 2000® Interface**
- **Only Gasoline**
- **1/8” Depth Accuracy (-25°C to 55°C)**
- **Up to 24” Depth Tanks**
- **2” Dead Band (2” Air Gap Required Between Sender and Fluid)**
- **Can be Calibrated for Irregular Shaped Tanks**
- **16 Point Calibration**
- **Non-Displacement Hulls Require Focus Tubes**
- **Empty Tanks Require Flat bottom**

TLM150 Tank Level Monitor (Gasoline)

Maretron's TLM150 is used to sense gasoline fluid levels of tanks using ultrasonic technology. Ultrasonic, or sound waves, are transmitted via the TLM150 mounted at the top of the tank and the flight times of the sound waves to and from the fluid are measured much like a depth sensor. What this means for you is that there are no difficult to handle long probes protruding into the tank, which often foul and/or corrode. Once the TLM150 calculates and broadcast the fluid level over the NMEA 2000® network, you can observe tank levels anywhere on the vessel where there is an NMEA 2000® compatible display such as the Maretron DSM250.

The TLM150 is capable of sensing gasoline levels in tanks up to 24" (0.61m) in depth (see TLM100 for fluid types other than gasoline in tanks up to 40" or the TLM200 for tanks up to 104"). Unlike most tank senders that only work with rectangular tanks, the TLM150 can be calibrated for irregular tank shapes so you can know the true fluid level in your tanks.

The TLM150 is mounted directly to the top of tanks using the industry standard SAE J1810 5-hole mounting pattern. The TLM150 can also be mounted to tanks with threaded tank openings using optional adapters that include both a 1.5" NPT and a 1.25" BSP adapter. The other important optional accessory for the TLM150 is the focus tube to permit use on boats with planing hulls, which is required if the vessel spends a significant amount of time with the bow pitched up.

Most importantly, the TLM150 is NMEA 2000® certified so you can view any and all tank levels anywhere on the vessel when using a compatible NMEA 2000® display. The TLM100 is another key component of Maretron's N2KView® vessel monitoring and control system.

Products

| PART NUMBER | DESCRIPTION |
|---|---|
| TLM150-01 | Tank Level Monitor (24" Depth Gasoline Tanks) |
| TA-6H-1.25BSP | 1.25" BSP Displacement Hull Tank Adapter |
| TA-6H-1.5NPT | 1.5" NPT Displacement Hull Tank Adapter |
| TFT-6H | SAE 5-Bolt Platform Non-Displacement Hull Focus Tube |
| TFT-1.25BSP | 1.25" BSP Non-Displacement Hull Focus Tube |
| TFT-1.5NPT | 1.5" NPT Non-Displacement Hull Focus Tube |

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# Tank Level Monitor TLM200

- **Ultrasonic Tank Sender with NMEA 2000® Interface**
- **All Fluid Types Except Gasoline**
- **1/8” Depth Accuracy (-25°C to 55°C)**
- **Up to 104” Depth Tanks**
- **6” Dead Band (6” Air Gap Required Between Sender and Fluid)**
- **Can be Calibrated for Irregular Shaped Tanks**
- **16 Point Calibration**
- **Supports All Tank Types**
  - ✓ **Fuel, Fresh Water, Waste Water, Live Well, etc**
- **Not Used on Non-Displacement Hulls**
- **Empty Tanks Require Flat bottom**

TLM200 Tank Level Monitor (104” Depth)

Maretron's TLM200 is used to sense fluid levels of tanks using ultrasonic technology. Ultrasonic, or sound waves, are transmitted via the TLM200 mounted at the top of the tank and the flight times of the sound waves to and from the fluid are measured much like a depth sensor. What this means for you is that there are no difficult to handle long probes protruding into the tank, which often foul and/or corrode. Once the TLM200 calculates and broadcast the fluid level over the NMEA 2000® network, you can observe tank levels anywhere on the vessel where there is an NMEA 2000® compatible display such as the Maretron DSM250.

The TLM200 is capable of sensing fluid levels in tanks up to 104" (2.64m) in depth. It can be used for diesel, fresh water, waste water, black water, and oil tanks (see the TLM100 for a lower cost solution for tanks up to 40" and the TLM150 for gasoline tanks). Unlike most tank senders that only work with rectangular tanks, the TLM200 can be calibrated for irregular tank shapes so you can know the true fluid level in your tanks.






The TLM200 is mounted directly to the top of tanks using the industry standard SAE J1810 5-hole mounting pattern. The TLM200 can also be mounted to tanks with threaded tank openings using optional adapters that include both a 1.5" NPT and a 1.25" BSP adapter.

Most importantly, the TLM200 is NMEA 2000® certified so you can view any and all tank levels anywhere on the vessel when using a compatible NMEA 2000® display. The TLM100 is another key component of Maretron's N2KView® vessel monitoring and control system.

Products

| PART NUMBER | DESCRIPTION |
|---|---|
| TLM200-01 | Tank Level Monitor (104" Depth Tanks) |
| TA-5H-1.25BSP | 1.25" BSP Displacement Hull Tank Adapter |
| TA-5H-1.5NPT | 1.5" NPT Displacement Hull Tank Adapter |

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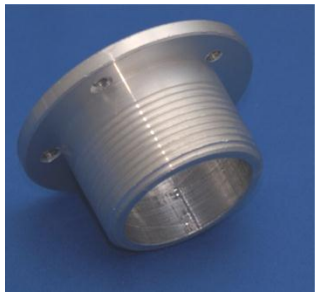
# Tank Level Monitor Accessories

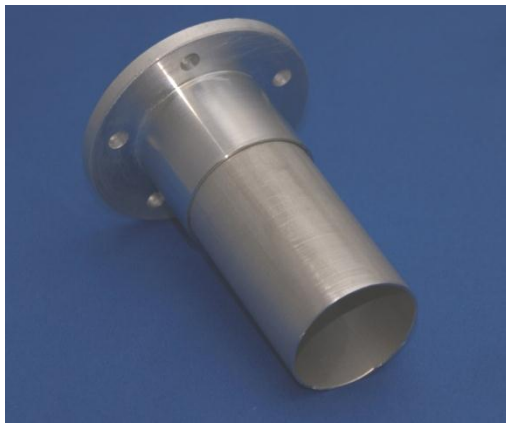


**Adapters Suitable for TLM100, TLM150, and TLM200**

- **TA-5H-1.5NPT** 1.5” NPT Displacement Hull Tank Adapter
- **TA-5H-1.25BSP** 1.25” BSP Displacement Hull Tank Adapter

**Focus Tubes Suitable for TLM100, TLM150**

- **TFT-5H** SAE 5-Bolt Pattern Non-Displacement Hull Focus Tube
- **TFT-1.5NPT** 1.5” NPT Non-Displacement Hull Focus Tube
- **TFT-1.25BSP** 1.25” BSP Non-Displacement Hull Focus Tube



**Airlocks Suitable for TLM100, TLM150**

- **TAL-5H** SAE 5-Bolt Pattern Black Water Airlock
- **TAL-1.5NPT** 1.5” NPT Black Water Airlock
- **TAL-1.25BSP** 1.25” BSP Black Water Airlock

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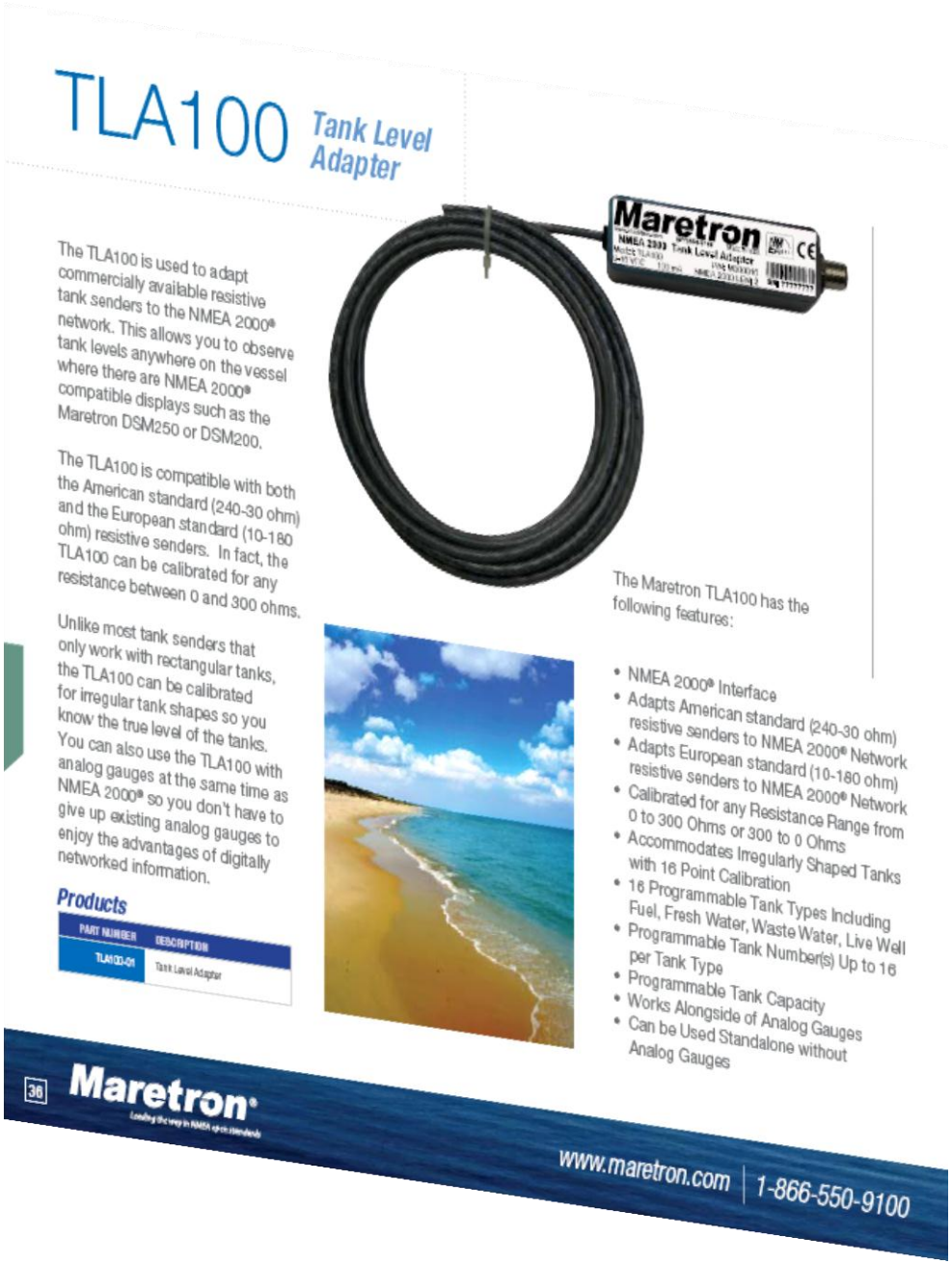
# Tank Level Adapter

- Adapts Resistive Tank Senders to NMEA 2000® (Royce, WEMA, etc.)
- American (240-30 ohm) or European (10-180 ohm) Standard Compatible
- Can be Calibrated for Irregular Shaped Tanks
- Can be Used With or Without Analog Gauges
- 16 Point Calibration
- Supports All Tank Types
  - ✓ Fuel, Fresh Water, Waste Water, Live Well, etc

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