# TruBlue™ 255 Level


- Level Accuracy of ±0.05% FS TEB
- <1cm Accuracy Error up to 10m $H_2O$
- Ten Year Permanent Battery
- Standard 8 MB Internal Memory for up to 550,000 Data Points
- Optional 56 MB Internal Memory for up to 3.7 Million Data Points
- User-friendly TruWare™ Software for PC or Mobile Included Free of Charge

CE

## DESCRIPTION

With our highly accurate, compact design, the Measurement Specialties TruBlue 255™ has set the standard for water level measurement. Now our next generation of water level data loggers – the TruBlue™ 255 Level – combines precision, performance, and rugged reliability like no other water level measurement instrument available today. Designed to deliver time and time again in even the harshest conditions, the TruBlue™ 255 Level is battery powered and features welded 316 stainless steel or titanium construction in a fully sealed design. Advanced, power-conserving microcomputer technology enables it to log level (depth) and temperature for up to ten years. Since these units do not require onsite power or a programmable logic controller (PLC), a terminal box isn't necessary.

The TruBlue™ 255 Level is the perfect choice for water level monitoring when reliability, accuracy and precision are needed in a compact, competitively priced design.

## FEATURES

- Calibration Report with each instrument
- New compact fully sealed design
- Two Year Warranty
- Easy set-up and data retrieval
- High speed data extraction
- Optional 56 MB internal memory
- Optional battery pack for rapid sampling

## APPLICATIONS

- Aquifer Characterization, Slug and Pump Tests
- Gage Height, River, Stream and Stage Gauging
- Tide and Harbor Gauging
- Flood and Storm Surge Measurement
- Wetlands and Stormwater Run-off Management
- Watershed and Recharge Monitoring
- Wave Studies and Rapid Sampling

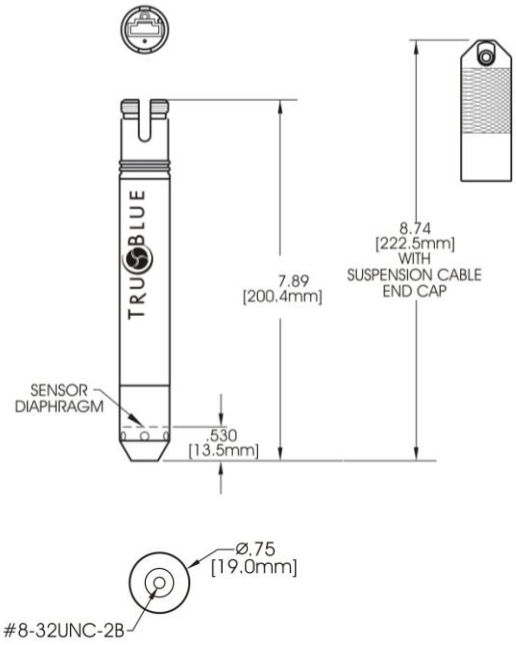
# TruBlue™ 255 Level

## SPECIFICATIONS

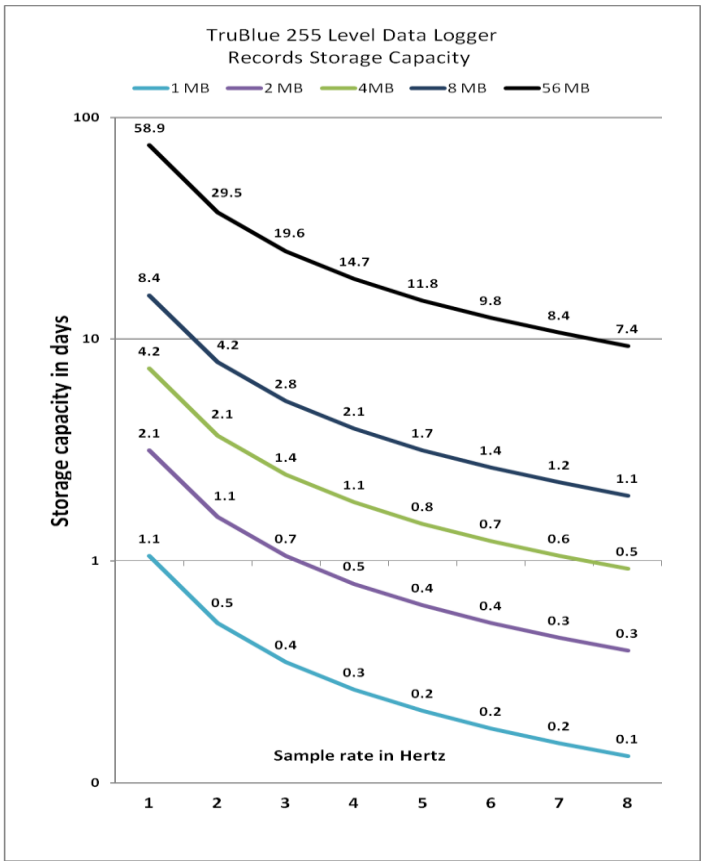
| | | |
|---|---|---|
| **SENSORS – LEVEL** | | |
| Sensor Type | | Oil-filled Piezoresistive |
| Sensor Material | | 316 SS or Titanium |
| Range (psia) | Low | 22 |
| | High | 300 |
| Accuracy | 0 – 50ºC | ±0.05% FS TEB |
| Resolution | | 0.01% FS or better |
| Burst | | 3X FS (600 psi max) |
| Accuracy is stated as total error band (TEB). This includes the combined errors due to non-linearity, hysteresis, non-repeatability and thermal effects. This accuracy can be maintained by performing semi-annual field calibrations. | | |
| **SENSORS – TEMPERATURE** | | |
| Sensor Type | | Embedded RTD |
| Range (ºC) | Low | 0 |
| | High | 50 |
| Accuracy | | ±0.1 ºC |
| Resolution | | 0.01 ºC |
| **PHYSICAL** | | |
| Diameter | inches | 0.75 |
| Length | inches | 7.89 |
| Weight | oz. | 6 |
| **OPERATING CONDITIONS** | | |
| Pressure (psia) | Low | 7 |
| | High | 3X FS (600 psia max) |
| * Temperature (°C) | Low | -20 |
| | High | 80 |
| * Accuracy affected exceeding 0-50 °C | | |
| **ELECTRICAL** | | |
| Internal Battery Type | | 3.6V lithium |
| Battery Life | One reading/ 5 minutes | 10 years |
| External Power | | 6-16 VDC (2 mA sleep, 15 mA active) |
| Communication Interface | | RS-485 (half duplex) |
| **DATA LOGGING** | | |
| Memory | Standard | 8 MB |
| | Optional | 56 MB |
| Data Points | Standard | 550,000 |
| | Optional | 3,733,000 |
| Clock Accuracy | | 2 min/year |
| Logging Rate | Linear | up to 8 Hz |
| | Linear Avg | programmable |
| | Event | programmable |
| Methods | Linear | ✓ |
| | Linear Avg | ✓ |
| | Event | ✓ |
| Data Extraction Rate | | 1500 measurements/sec. |
| Pressure Response Time | | < 1 second |
| Thermal Response Time | To achieve temperature compensation of the pressure sensor | < 10 minutes |

# TruBlue™ 255 Level

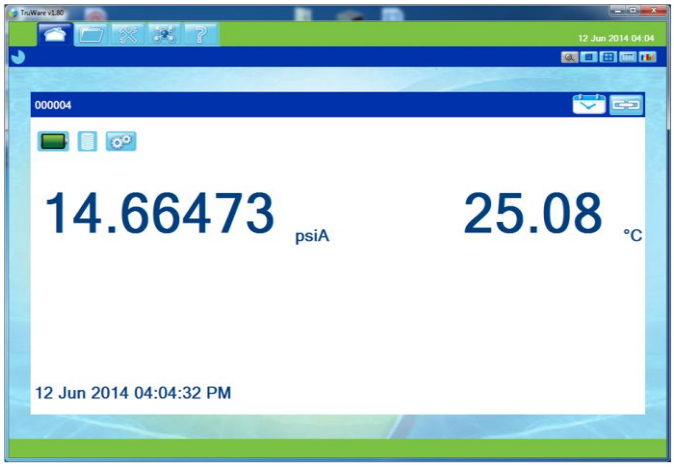
## DIMENSIONS




## SAMPLING RATES AND STORAGE




## SOFTWARE




Each unit comes with user-friendly TruWare™ software at no charge.

- View, graph, and export test data
- Easy to use in the field or office
- Easy conversion to accurate water level reading, fully compensated for barometric pressure, temperature and water density

# TruBlue™ 255 Level

## SYSTEM REQUIREMENTS

### 1. Pick a transducer model

| Model 8MB Memory | Model 56 MB Memory | Material | Range (PSI) | Label |
|---|---|---|---|---|
| 255-00320 | 255-70320 | Stainless Steel | 22 | 0-5.1m, 0-16.8 ft |
| 255-00330 | 255-70330 | Titanium | 22 | 0-5.1m, 0-16.8 ft |
| 255-00420 | 255-70420 | Stainless Steel | 30 | 0-10.8m, 0-35.3 ft |
| 255-00430 | 255-70430 | Titanium | 30 | 0-10.8m, 0-35.3 ft |
| 255-00520 | 255-70520 | Stainless Steel | 50 | 0-24.8m, 0-81.5 ft |
| 255-00530 | 255-70530 | Titanium | 50 | 0-24.8m, 0-81.5 ft |
| 255-00620 | 255-70620 | Stainless Steel | 100 | 0-60m, 0-196.8 ft. |
| 255-00630 | 255-70630 | Titanium | 100 | 0-60m, 0-196.8 ft. |
| 255-00720 | 255-70720 | Stainless Steel | 125 | 0-77.6m, 0-254.5 ft |
| 255-00730 | 255-70730 | Titanium | 125 | 0-77.6m, 0-254.5 ft |
| 255-00820 | 255-70820 | Stainless Steel | 300 | 0-200.6m, 0-658.3 ft |
| 255-00830 | 255-70830 | Titanium | 300 | 0-200.6m, 0-658.3 ft |

### 2. Decide on a communication cable

| Model | Description |
|---|---|
| 850 00851 | Absolute Communication Cable |
| 850 00857 | USB to Backshell Communication Cable |

### 3. Other cabling options can be found in the TruBlue™ Accessories Catalog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