

# OCF 6.1

Continuously monitor, display, totalize, and data log flow and level through any flume or weir.

**Easy to Install & Calibrate.  
Simple, Accurate, & Reliable.**

#### **Non-Contacting Sensor**

The OCF 6.1 uses a non-contacting, ultrasonic sensor mounted over a flume or weir to measure flow, or inside / above a tank to measure level. It is accurate, reliable, and verifiable. The separate, watertight electronics / display enclosure can be mounted within 152.4 m (500 ft) of the sensor. The OCF 6.1 continuously displays, totalizes, transmits, and data logs open channel flow or level.

#### **Keypad Operating System**

Use the built-in keypad for fast, easy configuration with menu selection of flume or weir and measurement units (e.g. liters, gallons, etc.) Configuration settings and data logs are password protected and retained during power interruptions. The OCF 6.1 will display on-screen flow or level reports with daily total, minimum, maximum, and average flow / level and will transfer data logs to a USB flash drive. PC software for easy report generation is included.

#### **26 Million Point Data Logger**

The OCF 6.1 stores time and date-stamped flow values at programmable intervals of 10 seconds to 60 minutes. Daily reports are automatically created and can be viewed right on the instrument's LCD display including total, minimum, maximum, and average flow rate or levels. Daily reports can also be downloaded easily to a USB drive in .csv format.



#### **THE RIGHT METER FOR**

- Flow Measurement with Flume or Weir:
- Influent
- Effluent
- Sewers
- Irrigation
- Environmental
- Tank Level Measurement:
- Water
- Wastewater
- Chemicals

#### **Smart Operating System**

The OCF 6.1 tracks flow continuously through a flume or weir. False echoes from turbulence, splashing rain, or snowfall are automatically rejected. Temperature compensation is automatic for high accuracy. The flow rate and totalizer are shown on the large backlit LCD display.



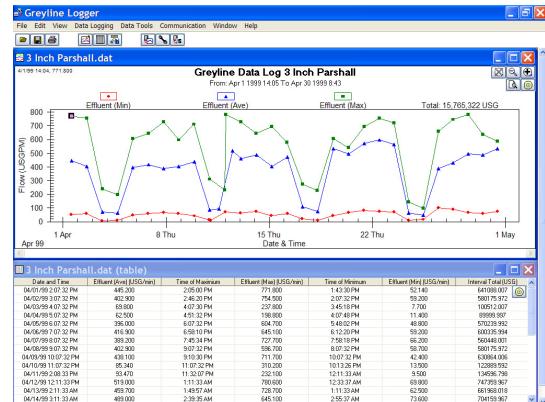
## Easy Data Logger Downloads

You don't need a laptop to retrieve log files! Plug any USB Flash Drive into the OCF 6.1 USB output to download data log files automatically. Downloaded files are sequentially named by the meter, so log files from the same, or multiple, instruments can be stored on one flash drive.

## Greyline Logger Software for Windows

Greyline Logger is included with each OCF 6.1. This powerful software displays data in both graph and table formats. You can view flow and level data onscreen, generate reports, and save files to disk. Graphs can be exported as images and data tables can be exported as delimited text files, or directly to Microsoft Excel.

- Display, analyze, and export log files in graph and table formats
- Generate reports including totalizer, minimum, maximum, average flow rates, and level
- Convert measurement units
- One-click export to Microsoft Excel



## Non-Contacting, Ultrasonic Sensor

Each OCF 6.1 includes either a non-contacting PZ15 sensor designed for the special requirements of open channel flow measurement, or a PZ32T sensor designed for the special requirements of tank level measurement. The ultrasonic sensor beams are narrow enough to work on very small flumes and powerful enough for really large applications. The OCF 6.1 automatically tunes to extended cable lengths up to 152.4 m (500 ft) lengths.

## OCF 6.1 Outputs Included

Connect the OCF 6.1's isolated 4-20mA output to external displays, chart recorders, or controllers and use the built-in relays for flow / level alarms and flow proportionate pulse to samplers, chlorinators, or external totalizers.

## Retains Memory During Power Interruptions

Date, time, calibration data, and user settings are stored and retained in back-up battery protected memory. Datalog files are stored in Secure Digital (SD) non-volatile memory.

## Security

Access to the OCF 6.1 calibration menu and settings are password-protected when enabled.

## Programmable for Any Flume or Weir

The OCF 6.1 includes a built-in 5-button keypad for fast, easy calibration. Select your choice of engineering units (gallons, liters, cubic meters, etc.) and choose your flume or weir type from the menu. The flowmeter also supports the entry of flow formulae for non-standard flumes and weirs. 'Find K&n' software (included) can be used to calculate non-standard calibration constants for entry into the OCF 6.1 calibration menu.

Built-in control relays can be programmed for flow alarms or a flow proportionate pulse for remote totalizers, samplers, or chlorinators. The isolated 4-20mA (or 0-5 V) output can be connected to chart recorders, remote displays, and controllers.



# Technical Specifications

## GENERAL SPECIFICATIONS

<b>Operating Parameters:</b>	Flume or weir to measure flow, or inside / above a tank to measure level
<b>Programming:</b>	Built-in 5-key calibrator with English, French, or Spanish language selection
<b>Electronics Enclosure:</b>	NEMA4X (IP66) polycarbonate with clear, shatterproof cover
<b>Accuracy:</b>	±0.25% of measured range or 2 mm (0.08 in) whichever is greater, Repeatability and Linearity: ±0.1%
<b>Display:</b>	White, backlit matrix — displays flow rate, totalizer, relay status, operating mode, and calibration menu
<b>Power Input:</b>	100-240 V AC 50/60 Hz (see Popular Options), 10 V A max depending on options
<b>Output:</b>	Isolated 4-20mA 0-5 V, 1 kΩ load maximum
<b>Control Relays:</b>	2 Relays, form 'C' dry contacts rated 5 A SPDT; programmable level alarm, pump control, pump alternation, failsafe / echo-loss, air temperature alarm
<b>Data Logger:</b>	Built-in 26 million point data logger with USB output and Windows software.
<b>Operating Temp. (Electronics):</b>	-20 °C to 60 °C (-5 °F to 140 °F)
<b>Approximate Shipping Weight:</b>	4.5 kg (10 lb)
<b>Approvals:</b>	CE, cCSAus

## TRANSDUCER SPECIFICATIONS

<b>Maximum Range:</b>	<ul style="list-style-type: none"><li>4.6 m (15 ft) with standard PZ15 sensor</li><li>9.8 m (32 ft) with standard PZ32T sensor</li></ul>
<b>Operating Temperature:</b>	-15 °C to 80 °C (5 °F to 175 °F)
<b>Deadband (Blanking):</b>	Programmable, Minimum 203.2 mm (8 in)
<b>Beam Angle:</b>	8°
<b>Operating Frequency:</b>	<ul style="list-style-type: none"><li>PZ15: 92 kHz</li><li>PZ32T: 42 kHz</li></ul>
<b>Operating Temperature:</b>	-40 °C to 65 °C (40 °F to 150 °F) with automatic temperature compensation
<b>Submersion Rating:</b>	Protected for accidental submersion to 3 m (10 ft) maximum
<b>Sensor Cable:</b>	RG62AU coaxial, 7.6 m (25 ft) standard length (See Popular Options)
<b>Hazardous Locations:</b>	<ul style="list-style-type: none"><li>Non-incendive for Class I, Div 2, Groups A, B, C, D</li><li>Optional: Intrinsically safe for Class I, Div 1, Groups C, D; Class II, Groups E, F, G; Class III; Encl. Type 4</li></ul>

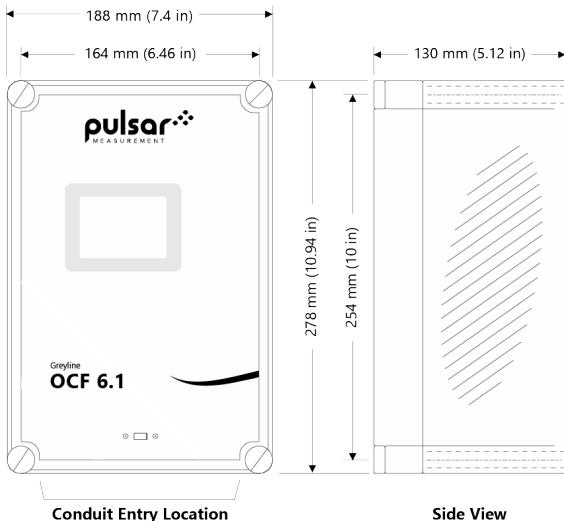
## POPULAR OPTIONS

<b>Industrial Automation Protocols:</b>	Modbus RTU via RS485
<b>Transducer Cables:</b>	15.2 m (50 ft) continuous or 30.5 m (100 ft) continuous RG62AU coaxial from sensor, or splice up to 152.4 m (500 ft) with junction box
<b>Intrinsic Safety Barriers:</b>	For sensor mounting in Class I, Div 1, Groups C, D; Class II, Groups E, F, G; Class III; Encl. Type 4 hazardous locations
<b>Power Input:</b>	9-32 V DC, 10 W max
<b>Control Relays:</b>	4 additional (6 total), rated 5 A SPDT
<b>Enclosure Heater:</b>	Thermostatically controlled to -40 °C/°F — recommended for temperatures below 0 °C (32 °F)
<b>Sunscreens:</b>	Sensor sunscreen and enclosure sunscreen for outdoor installations
<b>Sensor Mounting Stand:</b>	Adjustable, includes galvanized steel pipe, flanges, fittings, and hardware

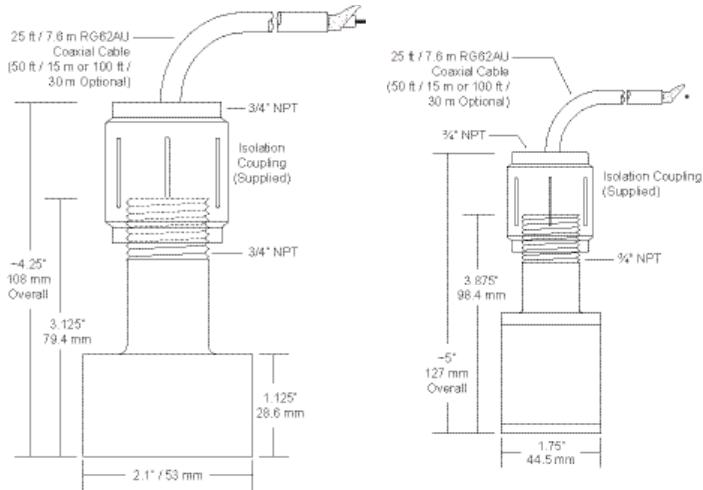


## Select LEVEL Mode for Tank Inventory & Level Control

Setup using the built-in keypad is fast and easy. Scroll through the menu prompts to configure the OCF 6.1 to display level in your choice of measurement units (ft, gallons, liters, inches, meters, mm, percent, etc.) for vertical and horizontal round tanks. Connect external devices through the OCF 6.1's isolated 4-20mA output or control relays.



Greyline OCF 6.1 Front & Side View



PZ15 & PZ32T Sensors



Delivering the Measure of Possibility

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