



OCF 6.1

OPEN CHANNEL FLOW & TANK LEVEL METER



THE RIGHT METER FOR

Flow Measurement with a Flume or Weir:

- Influent
- Effluent
- Sewers
- Irrigation
- Environmental

Tank Level Measurement:

- Water
- Wastewater
- Chemicals

Features

- Safe, Non-Contact Measurement
- Simple 5-key Configuration
- 4-20mA/0-5V Output
- 26-Million Point Data Logger
- On-Screen Flow Reports
- Password Protected
- Modbus® RTU Optional

Easy to Install and Calibrate. Simple, Accurate and 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 500 ft (150 m) 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. gallons, liters, 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.



Built-in Data Logger Creates Flow Reports. Save time and labor — flow information is stored automatically.



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.

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, and 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 500 ft (150 m) lengths.

OCF 6.1 Outputs Included

Connect the OCF 6.1's isolated 4-20 mA 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. Data log files are in stored Secure Digital (SD) non-volatile memory.

Security

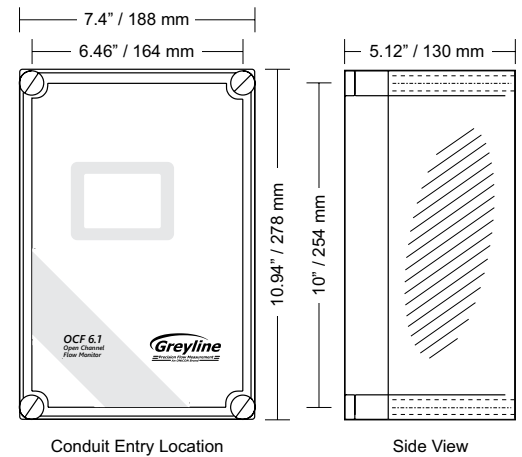
Access to the OCF 6.1 calibration menu and settings are password protected when enabled.



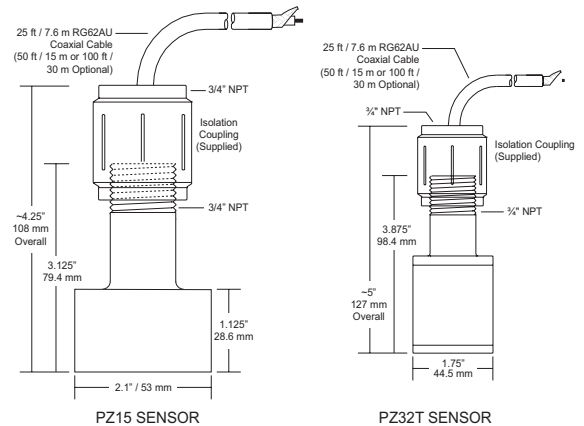
Technical Specifications

GENERAL	
Electronics Enclosure:	Watertight and dust tight NEMA4X (IP 66) polycarbonate with clear, shatterproof cover
Accuracy:	±0.25% of measured range or 0.08" (2 mm) whichever is greater, Repeatability and Linearity: ±0.1%
Display:	White, backlit matrix - displays flow rate, totalizer, relay status, operating mode, and calibration menu
Programming:	built-in 5-key configurator with English, French or Spanish language selection
Power Input:	100-240 VAC 50-60 Hz (see Options), 10 VA max depending on options
Output:	Isolated 4-20 mA/0-5 V, 1000 ohm load maximum, programmable offset
Control Relays:	2 Relays, form 'C' dry contacts rated 5 amp SPDT; programmable level alarm, pump control, pump alternation, failsafe/echo-loss, air temperature alarm
Electrical Surge Protection:	Sensor, 4-20 mA and AC power input
Data Logger:	Built-in 26-million point data logger with USB output and Windows® software.
Operating Temperature (Electronics):	-5° to 140°F (-20° to 60°C)
Approximate Shipping Weight:	10 lbs (4.5 kg)
Approvals	CE, cCSAus

SENSOR	
Maximum Range:	15 ft (4.57 m) with standard PZ15 sensor 32 ft (10 m) with standard PZ32T sensor
Deadband (Blanking):	Programmable, Minimum 8 in (203.2 mm)
Beam Angle:	8°
Operating Frequency:	PZ15: 92 kHz; PZ32T: 42 kHz
Exposed Materials:	PZ15: PVC; PZ32T: PVC and Teflon
Operating Temperature:	-40° to 150°F (-40° to 65°C) with automatic temperature compensation
Submersion Rating:	Protected for accidental submersion to 10 ft (3 m) maximum
Sensor Cable:	RG62AU coaxial, 25 ft (7.6 m) standard length (See Options)



POPULAR OPTIONS	
Industrial Automation Protocols:	Modbus RTU via RS-485
Sensor Cable:	50 ft (15 m) continuous or 100 ft (30 m) continuous RG62AU coaxial from Sensor, or splice up to 500 ft (150 m) with Junction Box
Intrinsic Safety Barriers:	For Sensor mounting in Class I,II,III, Div. I,II, Groups C,D,E,F,G hazardous locations
Power Input:	9-32 VDC, 10 Watts max
Control Relays:	4 additional (6 total), rated 5 amp SPDT
Enclosure Heater:	Thermostatically controlled - recommended for temperatures below 32°F (0°C)
Sunscreens:	Sensor sunscreen and enclosure sunscreen for outdoor installations
Sensor Mounting Stand:	Adjustable, includes galvanized steel pipe, flanges, fittings and hardware





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 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 4-20 mA (or 0-5 V) output can be connected to chart recorders, remote displays and controllers.

Select LEVEL mode for Tank Inventory & Level Control

Set-up 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 4-20 mA output or control relays..

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. Flow rate and totalizer are shown on the large backlit LCD display.

- Works with any Flume or Weir
- Built-in Totalizer
- Password Protected