

# SIGNAL CONDITIONERS FOR TURBINE METERS

Suitable for Direct Mounting onto FTB-930 and FTB-940 Series Flowmeters

All units are suitable for direct mounting onto the FTB-930 turbines see page F-54 or visit [omega.com/ftb930](http://omega.com/ftb930)



FLSC-64  
\$271  
As Shown

## FLSC-61 \$431 0 to 5/0 to 10 Vdc Output

The FLSC-61 is a 3-wire analog transmitter designed to linearly convert a frequency input to an equivalent voltage output whose level is switch selectable @ 0 to 5V/0 to 10V. A full scale frequency range of 75 Hz to 10 kHz is jumper-selectable. The span adjustment establishes the frequency point at which the full scale voltage output (5 or 10V) is achieved. A sensitivity adjustment permits the FLSC-61 to discriminate between a signal input and noise.

### SPECIFICATIONS

#### Temperature:

**Operating:** -40 to 85°C (-40 to 185°F)

**Storage:** -65 to 125°C (-85 to 257°F)

**Input Voltage:** 12 to 28 Vdc @ 50 mA max

**Signal Input:** Frequency 0 to 10 kHz; amplitude 50 mV to 35V sine or square-wave; impedance 10 kΩ

**Analog Output:** 0V @ 0 Hz, 5 or 10V @ desired full scale frequency

#### Full Scale Range:

75 Hz to 10 kHz, selectable

#### Response Time:

95% of change in 1 second

#### Linearity:

0.3% FS  
Temperature Coefficient: <2% of rdg over entire temperature range

**Minimum Load Resistance:** 250 Ω

**Enclosure:** FM Approved; Class I, Groups, B, C, D; Class II, Groups E, F, G

**Weight:** 771 g (1.7 lb)

## FLSC-62A \$431 4 to 20 mA Output

(Not Shown)

The FLSC-62A is a 2-wire loop-powered analog transmitter designed to linearly convert a frequency input to an equivalent 4 to 20 mA current output.

A full scale frequency range of 100 Hz to 10 kHz is switch selectable. The span adjustment establishes the frequency point at which a 20 mA output is achieved. A sensitivity adjustment permits the FLSC-62A to discriminate between signal input and noise.

### SPECIFICATIONS

#### Input Voltage:

**Minimum:** 7V + (20 mA x RL)

**Maximum:** 28V + (4 mA x RL)

**Analog Output:** 4 mA @ 0 Hz, 20 mA @ desired full scale frequency

#### Full Scale Range:

100 Hz to 10 kHz, selectable

#### Response Time:

95% of change in 1 second

#### Linearity:

0.3% FS  
Temperature Coefficient: <2% of rdg over entire temperature range

**Minimum Load Resistance:** 250 Ω

**Maximum Load Resistance:** 500 Ω

**Enclosure:** FM Approved; Class I, Groups, B, C, D; Class II, Groups E, F, G

**Weight:** 771 g (1.7 lb)

ALL MODELS  
AVAILABLE FOR  
FAST DELIVERY!

## FLSC-64 \$271 Amplifier Squarewave Output

The FLSC-64 amplifies and conditions low-amplitude signals such as those developed by a magnetic pickup coil. The amplitude of the squarewave output equals the input supply voltage of the FLSC-64.

A sensitivity adjustment permits the FLSC-64 to discriminate between an input signal and noise. The

FLSC-64 contains a built-in test oscillator that enables the operator to verify the amplifier's operation without a signal source. The power LED illuminates when the input supply voltage is present.

### SPECIFICATIONS

#### Temperature:

**Operating:** -40 to 85°C (-40 to 185°F)

**Storage:** -65 to 125°C (-85 to 257°F)

#### Input Voltage:

5 to 28 Vdc, 12 mA @ 12 Vdc

#### Signal Input:

**Frequency:** 0 to 10 kHz

**Amplitude:** 20 mV pp minimum

-35V sine or square-wave

**Impedance:** 10 kΩ

**Output:** 5 to 28 Vdc squarewave proportional to input voltage; minimum load @ 250 Ω; short circuit protection

**Features:** Individual LED indicators for power and output signal; built-in test oscillator that injects 4 Hz test signal when Test P/B depressed

**Enclosure:** FM Approved; Class I, Groups, B, C, D; Class II, Groups E, F, G

**Weight:** 771 g (1.7 lb)

**Size:** 142 W (without union coupling) x 61 D x 95 mm Dia. (5.6 x 2.4 x 3.75")



FLSC-61, \$431, shown mounted onto FTB-939 turbine, \$1335. See page F-54 or visit [omega.com/ftb930](http://omega.com/ftb930)



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

[www.omega.de](http://www.omega.de)  
Deckenpfronn, Germany  
0800-8266342

#### UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)  
Manchester, England  
0800-488-488

#### FRANCE

[www.omega.fr](http://www.omega.fr)  
Guyancourt, France  
088-466-342

#### CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)  
Karviná, Czech Republic  
596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
Amstelveen, NL  
0800-099-33-44



## More than 100,000 Products Available!

### • Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

### • Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

### • pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

### • Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters