

## HOW A 5600 SERIES CONTROLLER WORKS:

The 5600 Series is an ultrasonic liquid level and open channel flow controller. It is a non-contact system which means no contamination of material, no lost parts or cables, no material build-up on the sensing face, and it is not affected by grease, suspended matter, silt or corrosive chemicals.

The 5600 Series Controller includes the Sentry™ DSP filter which provides stable, accurate readings under a variety of conditions. Sentry™ digitally separates the true level of material from noisy process conditions often experienced in industrial environments.



Easy to set up, the 5600 Series provides usable level and flow information within minutes. Responses to simple Quick Config questions supplies the 5600 Series Controller with the information needed to prepare and calibrate the system for your application. Later, a refinement of calibration parameters can be performed if necessary. Setpoint and current outputs are included for local control.

For level, the 5600 Series can monitor up to 8 transducers of various frequencies, and vessels of different heights and shapes, and for open channel flow it provides uniform and reliable flow measurement data and assists in meeting water quality regulatory requirements.

Plug-in option cards are available to interface the 5600 Series Controller data to a variety of monitoring and control systems.

## Benefits

Quick Config	Adjusts systems parameters and pre-calibrates unit without special software
Continuous Non-Contact Level Measurement	No contamination of material, no lost parts or cables
Sentry™ DSP	Provides stable and accurate reading under noisy process conditions
Built-in Optically Isolated Serial Port	Versatile interfacing for data collection, servicing and building large multi-vessel communications systems
NEMA-4X Enclosure	FRP or optional stainless steel offers the right protection for your environment

### HOW THE 5600 WORKS FOR OPEN CHANNEL APPLICATIONS

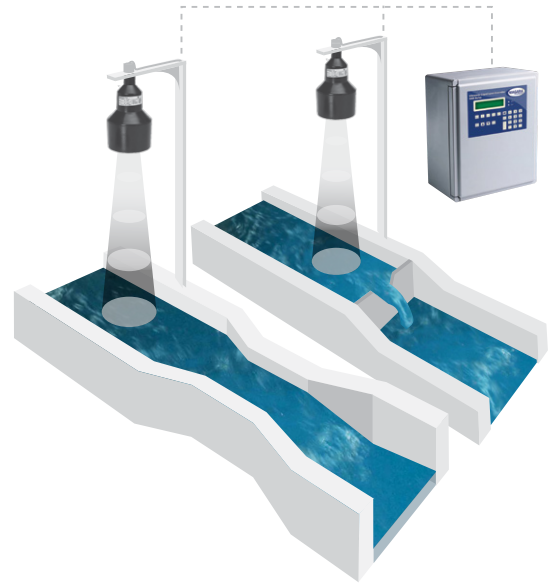
The 5600 Ultrasonic non-contact measurement system operates by transmitting an ultrasonic signal (sound wave) from the transducer to the surface of the liquid being measured. A reflection or echo is received, processed and the distance to the fluid is obtained. This distance, combined with the pre-programmed dimensions of the flume, weir or nozzle, is converted to flow.

#### Benefits

- Continuous and reliable measurement
- Accuracy of 0.25% of measured distance or 0.25" whichever is greater
- 4-20mA output and RS422, RS485 communication
- Sentry DSPTM offers stability even in noisy environments
- Each controller monitors up to 4 ultrasonic transducers

#### Approvals

- CSA, FM, CE



### HOW THE 5600 WORKS FOR LEVEL APPLICATIONS

The 5600 Ultrasonic non-contact continuous level measurement system operates by transmitting an ultrasonic signal (sound wave) from the transducer to the surface of the liquid being measured. A reflection or echo is received, processed and the distance to the fluid is obtained. This distance, combined with the dimensions of the vessel, is converted to volume.

#### Benefits

- Continuous and reliable measurement
- Accuracy of 0.25% of measured distance or 0.25" whichever is greater
- Measures distances up to 50 feet
- 4-20mA output and RS422, RS485 communication
- Sentry DSPTM offers stability even in noisy environments
- Each controller monitors up to 8 ultrasonic transducers

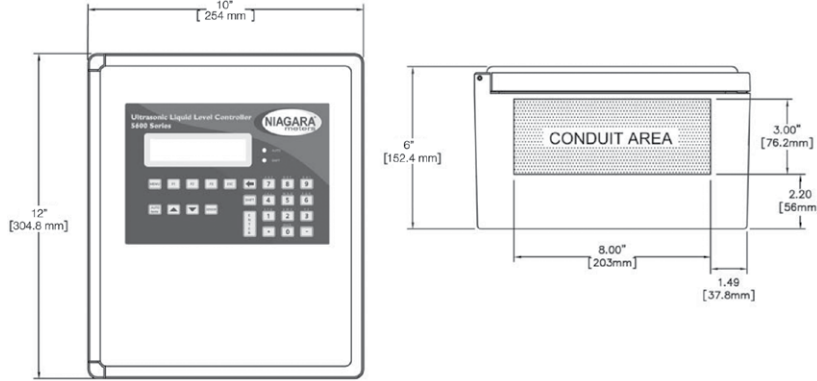
#### Approvals

- CSA, FM, CE

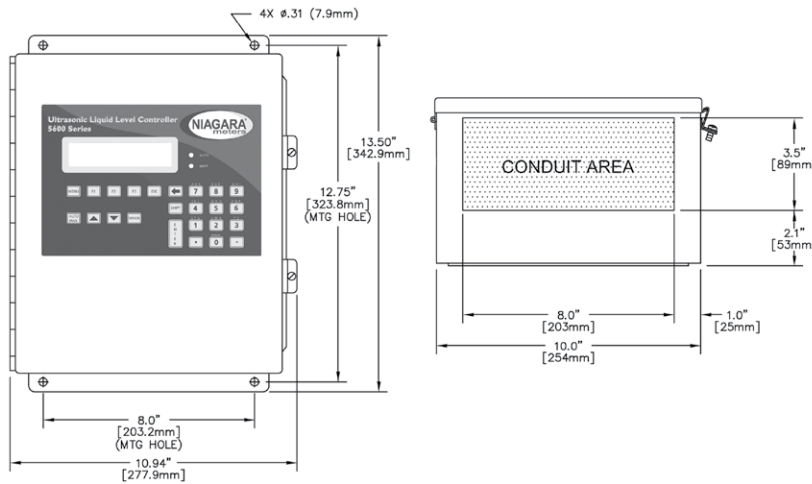


**DIMENSIONS**

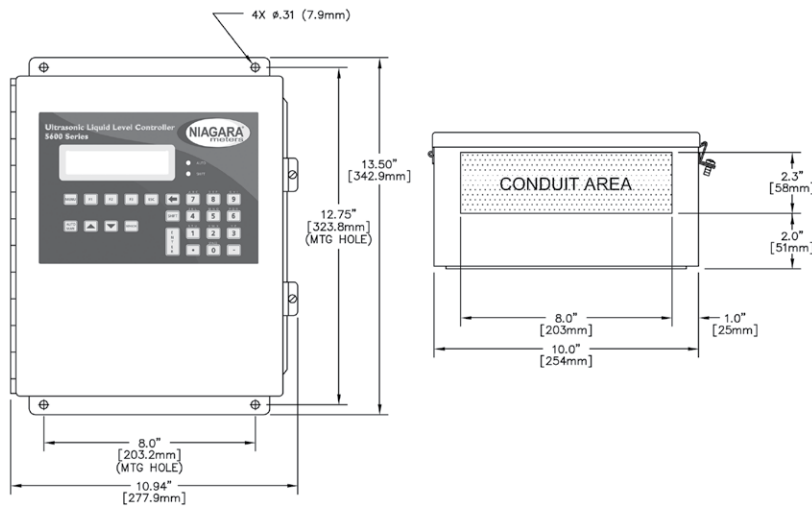
**NEMA-4X Fiberglass Enclosure**



**NEMA-4X Fiberglass Enclosure**



**NEMA-4X Steel Enclosure**



## FUNCTIONAL SPECIFICATIONS

Display	Large, back lit alphanumeric liquid crystal, two lines of 16 characters, user programmable IDs, selectable bar graph display or engineering units format
Programming & Parameter	Integral 24-key sealed membrane with a tactile keypad
Set-up	Menu-driven prompts
Memory	Non-volatile RAM, common isolation parameter storage during power loss
Built-in Serial Communication	RS-422, RS-485, (optical isolation standard), 1200, 2400, 4800, 9600 or 19.2 K baud; designed for multi-drop single cable connection
Relay Output	Form "C" SPDT, programmable, 10A 110VAC, 8A 230VAC non-inductive, 10A 30VDC; available as 8 relays outputs
<b>Option Cards</b>	A maximum of three plug-in option cards can be added
Scanner/ Transducer	For multiple channel expansion; available with 2, 4, or 8 inputs; first scanner card must installed in the first option slot
4-20mA Output	Isolated 600 ohms, maximum or externally powered to 1000 ohms, 12 bit resolution; available as plug in modules of 2,4 and 8 outputs with common isolation; must be installed in third option slot
<b>Electrical</b>	
Voltages	100VAC 50/60 Hz, 110/230VAC ( $\pm 10\%$ ) 50/60 Hz
Power Requirement	20VA
<b>Environmental</b>	
Operating Temp	-5° to 140° F (-20° to 50° C)
Storage Temp	-22° to 140° F (-30° to 60° C)
Humidity	1% to 95% (non-condensing)
Enclosures	NEMA 4X fiberglass reinforced polyester (FRP) with 24-key, sealed elastomer keypad, NEMA 4X stainless steel and optional mild steel NEMA-4 for CE version. 5600 Series has Nema 4X compression molded fiberglass, reinforced polyester and a silicon door gasket
<b>Physical</b>	
Dimensions	FRP: 12.0 in. (305 mm) x 10.75 in. (273 mm) x 5.62 in. (173 mm) Stainless Steel: 12.0 in (305 mm) x 10.0 in (254 mm) x 6.0 in (152 mm)
Weight	12 pounds (5.45 kg)

## ORDERING INFORMATION

Model # 56C - A	8
A = 110-120/230VAC, 50/60 Hz	
2 = 2 channel, 2 output (420 mA)	
4 = 4 channel, 4 output (420 mA)	
8 = 8 channel, 8 output (420 mA)	
	8 = 8 relays