

# Level by Sound Knowledge



## SHORTI

ULTRASONIC LEVEL MEASUREMENT AND CONTROL

**KAB** INSTRUMENTS (PTY) LTD



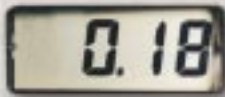
# SHORTI - Principle of Operation

The SHORTI range of compact ultrasonic level equipment is designed to measure liquid and solid levels up to a range of 8 meters (5 m of LP). The range can be configured by the keyboard and display. The SHORTI is mounted on top of the vessel or Tank. The microprocessor in the SHORTI fires an electronic pulse, which the transducer converts into an acoustic pulse. The pulse travels to the levels to the level that is being measured and is reflected back to the transducer. The transducer then converts its energy back into an electronic signal and stops the counter in microprocessor, which then knowing the speed of sound through the air, can accurately determine the distance. The powerful software removes false echoes and the electronic filter removes ambient noise.

## SHORTI Setup:

### 4 DIGIT ALPHA-NUMERIC DISPLAY

The SHORTI comes with a 4 digit alpha-numeric display which allows the user to set up the instrument with ease.



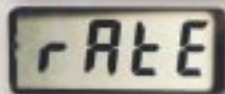
Picture 1 shows the display in the normal run mode. The display shows the level in meters



Picture 2 shows the prompt for the security code. The user must enter the code correctly before any further changes can be made



Picture 3 shows where a selection can be made. This selection is to setup the span for the SHORTI



Picture 4 shows the Rate of Change, which can be adjusted to change the response time of the SHORTI

## Features

- Ease of installation and configuration.
- Inexpensive level indication.

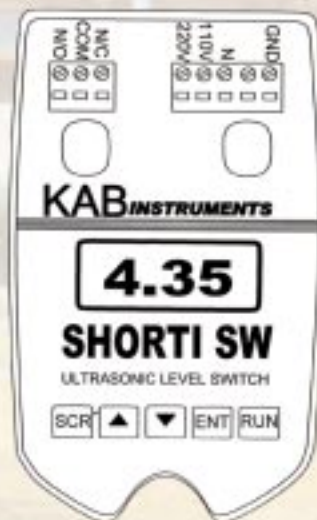
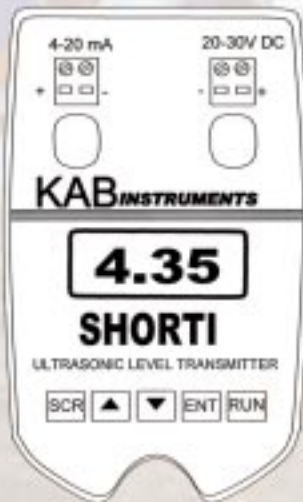
The SHORTI is a 3 or 4 wire ultrasonic level transmitter with an output of 4-20mA

The SHORTI LP is a loop powered ultrasonic level transmitter. THIS UNIT CAN ONLY WORK ON LIQUID LEVELS.

## Options

Flange mounting

The SHORTI SW is an Ultrasonic level switch





# Specifications

## Shorti 3/4 Wire

**Enclosure**  
UPVC

**Power Supply**  
20-30 Vdc

**Dimensions**  
Electronics 197mm x 86mm  
Transducer 59mm x 52mm  
2 Inch BSP or NPT thread

**Weight**  
1.2 Kilogram's

**Temp range**  
-30 °C to 65 °C Temperature compensated

**Output**  
4-20 mA max impedance 750 ohms

**Range**  
8 meters

**Accuracy**  
+/- 1%

**Local indication**  
4 Digit LCD

**Configuration**  
5 Touch button keys

**Blanking distance**  
0.3 meters

**Rate of change**  
0,1 to 10 meters/min

**Operating frequency**  
53 KHz

**Approvals**  
CE compliant to EN 50081  
EN 50082



SHORTI LP measuring slurry, level being controlled by variable speed drive.

## Shorti LP Loop powered

**Enclosure**  
UPVC

**Power supply**  
20-30 Vdc

**Dimensions**  
Electronics 197mm x 86mm  
Transducer 59mm x 52mm  
2 Inch BSP or NPT thread

**Weight**  
1.2 Kilogram's

**Temp range**  
-30 °C to 65 °C Temperature compensated

**Output**  
4-20 mA max impedance 750 ohms

**Range**  
5 meters

**Accuracy**  
+/- 1%

**Local indication**  
4 Digit LCD

**Configuration**  
5 Touch button keys

**Blanking distance**  
0.3 meters

**Rate of change**  
0,1 to 10 meters/min

**Operating frequency**  
53 KHz

**Approvals**  
CE compliant to EN 50081  
EN 50082



## SHORTI SW Leve

**Enclosure**  
UPVC

**Power Supply**  
220 Vac 110 Vac

**Dimensions**  
Electronics 197m  
Transducer 59mm  
2 Inch BSP or NP

**Weight**  
1,2 Kilogram's

**Temp range**  
-30 °C to 65 °C Te compensated

**Output**  
1 x SPDT 5 Amp low level

**Range**  
8 meters

**Accuracy**  
+/- 1%

**Local indication**  
4 Digit LCD

**Configuration**  
5 Touch button ke

**Blanking distance**  
0.3 meters

**Rate of change**  
0,1 to 10 meters/m

**Operating freque**  
53 KHz

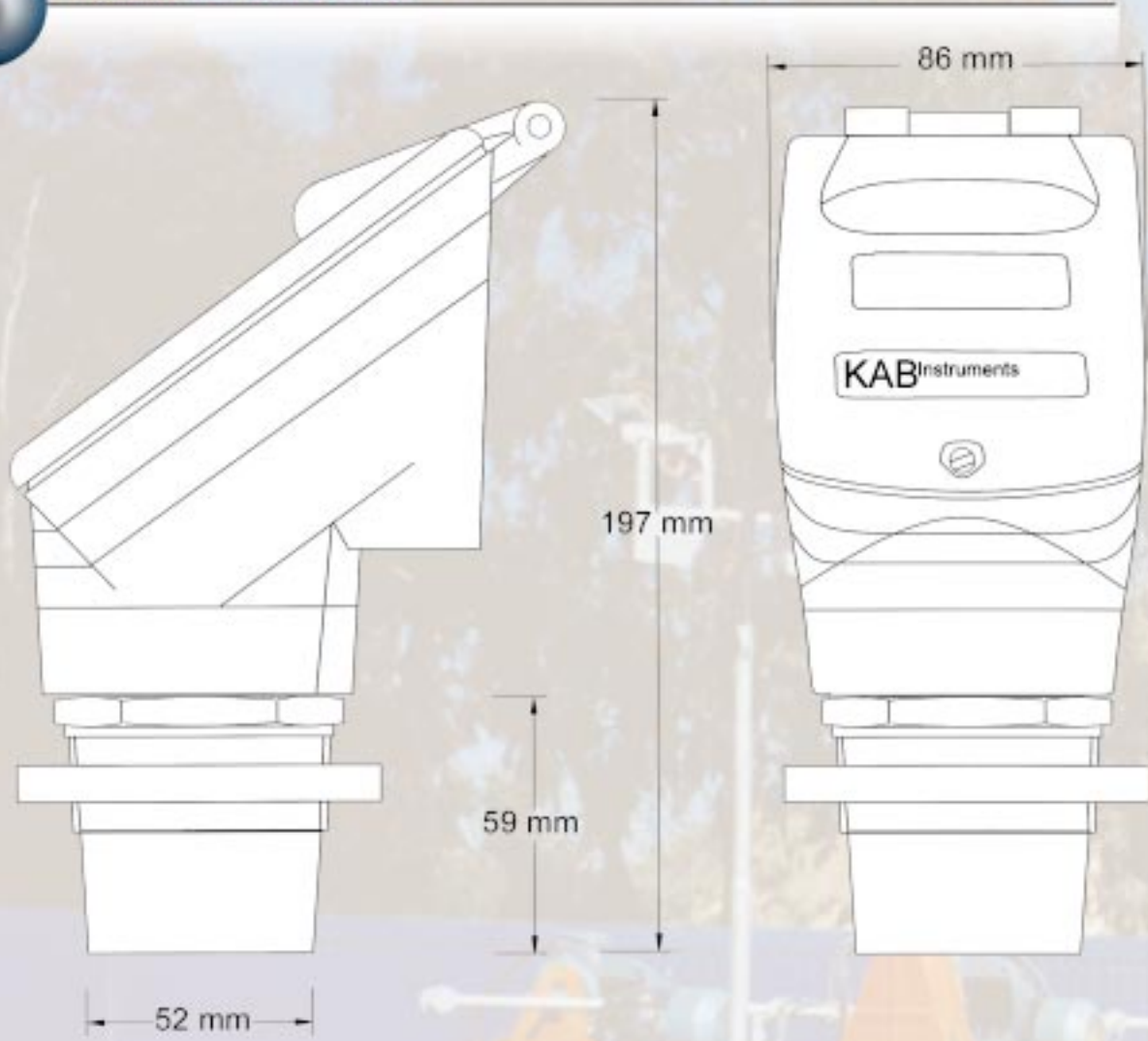
**Approvals**  
CE compliant to E  
EN 50082



SHORTI SW controlling slur with ON/OFF Valve.



# DIMENSIONS



## Ordering Code

### SHORTI 3 Wire

SHORTI UPVC  
 UPVC (UPVC)  
 PTFE (PTFE)  
 Foam (F)

### SHORTI SW

SHORTI SW 220 UPVC  
 220VAC (220)  
 110VAC (110)  
 UPVC (UPVC)  
 PTFE (PTFE)  
 Foam (F)

### SHORTI LP

SHORTI LP UPVC  
 UPVC (UPVC)  
 PTFE (PTFE)

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