



# WATER AND SNOW RADAR LEVEL SENSOR

## Models PULS-61 and PULS-62

### DESCRIPTION

RADAR level transmitters provides distance measurements based on the running time of microwave pulses transmitted to and reflected from the surface of the water, snow or other liquid and solid surfaces.

Our **PULS-61/62 RADAR** level sensors operate in the time domain, using a high pulse repetition frequency (PRF) and therefore it does not require FFT analysis, that characterizes FM or CW radars.

Pulse RADAR operates purely within time domain. Millions of pulses are transmitted every second and a special sampling technique is used to produce a "time expanded" output signal.

Microwaves transmitters are virtually unaffected by neither temperature nor atmospheric pressure, air density, winds or any other weather conditions. RADAR technology is intrinsically very accurate, allowing also a broad margin of



programmable measurement ranges ( up to 30 meters and more ), perfectly adapted to the site requirements.

Our RADAR level sensors have an accuracy of 3mm to 5 mm in the whole range for individual measurements, and 1 mm to 3mm for averaged values when connected to our Data Loggers 2000C and 3000C Series.

This accuracy cannot be achieved by ultrasonic technology, as if the weather conditions vary, then ultrasonics becomes more vulnerable to large errors and erratic readings.

The ultrasonic technology has been used with varying success in several applications. The latest transducer designs have pushed ultrasonic technology to the limits that physics will allow, and just physics is the reason why RADAR is displacing ultrasonics in more and more applications.

### SPECIFICATIONS

#### Model PULS-61

- Range : 0-10 or 0-20 meters
- Accuracy:
  - o  $\pm 5$  mm (for individual measurements)
  - o  $\pm 3$  mm (for averaged values, when connected to HYDRO-DATA-2000/3000C Remote Units)
- Output signal : 4-20 mA (two-wire).
- Adjustment: By external module (Model PLICSCOM quoted separately), plugged into the sensor, or by PC

#### Model PULS-62

- Range : 0-30 meters (programmable)
- Accuracy:
  - o  $\pm 3$  mm ( for individual measurements)
  - o  $\pm 1$  mm (for averaged values, when connected to HYDRO-DATA-2000/3000C Remote Units)
- Output signal : 4-20 mA ( two-wire ).
- Adjustment: By external module (Model PLICSCOM quoted separately), plugged into the sensor, or by PC

### KEY FEATURES

- # NO Temperature effects
- # NO Atmospheric pressure effects
- # NO Wind effects
- # NO Rain and Relative Humidity effects
- # Up to 1mm accuracy in averaged values
- # Measuring range up to more than 30 meters ( adjustable )
- # Very high stability
- # Directly connectable to METEODATA/ HYDRODATA -2000C/3000C Data loggers for data storage and data transmission
- # Low power consumption

