Datasheet QT0161-UDT-SPC

Ultrasonic Density Transmitter

Principle

Ultrasonic spectroscopy

Description

Model UDT is designed to control ultrasonic probes, to convert its analog echo's to digital information and to calculate the properties of the reflected echo's. This data is available on the Modbus RTU data line for connection to the remote analyzer. The heart of the system is a Spartan Xilinx FPGA, for accurate and fast calculation of ultrasonic information.

Features

- Control of ultrasonic probes in the field
- Calculating walking average of monitored data
- Echo tracking and tracing
- Calculation of deviation coefficient
- Low power consumption

Specification

- Ultrasonic probes up to 2 nF, suits all Arenal ultrasonic probes
- Ambient temperature range: 3-55°C
- Power supply: 24Vdc-11W

Connectivity

- 2-wire RS485 Modbus RTU
- 4-wire PT1000
- Ultrasonic probe terminals

Mounting

- Strong and durable aluminum enclosure with powder coating
- Mounting max 25 meter from the ultrasonic sensor
- Wall mounting without opening lid

Engineering specifications

Make: Arenal PCS BV, The Netherlands
Advanced Ultrasonic Transmitter electronics in industrial enclosure

- With T-Piece functionality
- Firmware version: V62 for Rev.E
- Enclosure material: powder coated aluminum, off-white
- Enclosure Model: AR120
- Protection degree: IP66
- Power supply by PCA only (24Vdc)
- Power consumption: 11W
- Digital data communication line, Modbus RTU over RS485
- Probe type: all Arenal analytical ultrasonic probes
- With PT1000 circuit

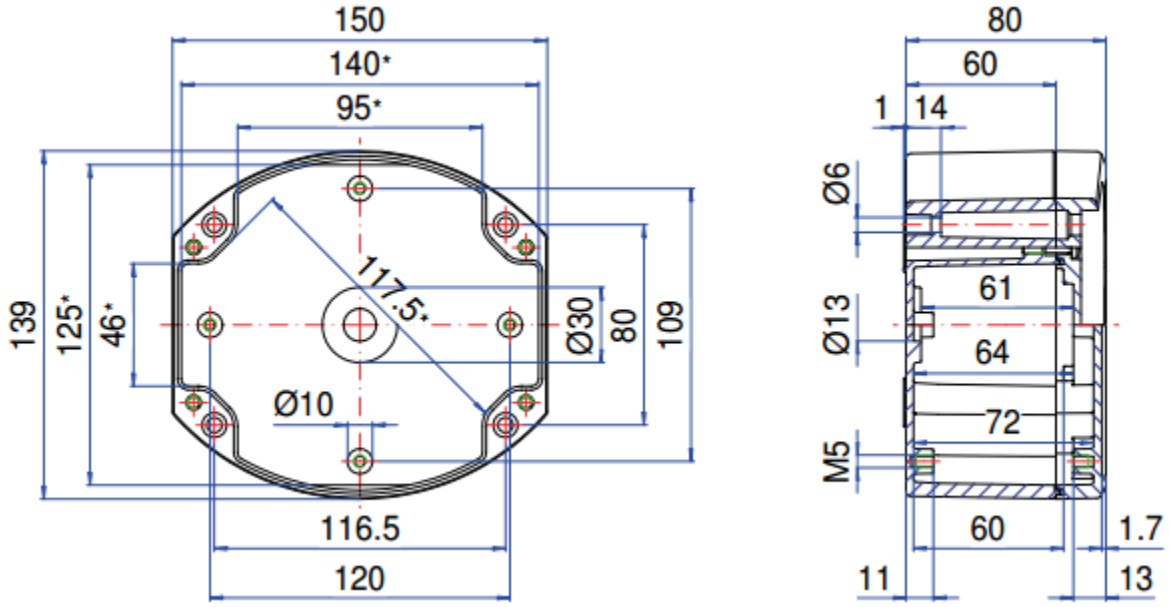
Product variations

QT0161-UDT-SPC
> Cable gland M6 for coax cable (on bottom)
> Cable gland 1x M20x1,5

QT0162-UDT-SPC
> LEMO.1V connector
> Cable gland 1x M20x1,5

QT0163-UDT-SPC
> Cable gland 1x M16x1,5
> Cable gland 1x M20x1,5

Dimensional drawing



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