METEOROLOGY
HYDROLOGY
ENVIRONMENTAL MONITORING

Contactless flow sensor

Description

The sensor has an integrated radar surface velocity and level meter for contactless measurements of surface flow velocity and water level.

Contactless radar technology enables quick and simple sensor installation above the water surface with minimum maintenance.

Calculation of the total flow discharge is internally implemented within the instrument by combining surface velocity measurement, water level measurement, and a configured cross-section of the river or channel.

Defining the measurement parameters such as profile cross-section, material of the edges, location of the sensor above the water, and all other instrument settings can be easily set with the Geolux configuration application using any available communication interface.

CARACHTERSITICS AND BENEFITS

- Contactless flow measurement and surface speed measurement;
- Integrated discharge (flow) calculation
- RS-232, RS-485 Modbus, SDI-12, and analog 4-20 mA interfaces in all models;
- Remote configuration of all instrument parameters through any digital communication interface;
- Robust IP68 aluminum or stainless steel enclosure.

APPLICATION FIELDS

- Early flood warning;
- Monitoring of flow and irrigation channels;
- Accurate discharge monitoring in rivers;
- Flow tracking in salt and copper mine channels;
- Sewage and waste water discharge measurement.

Non-contact flow sensor

Flow sensor - application example

Techincal specifications may be varied without prior notice

MTX S.r.l.
Via Zamboni, 74 – 41011 Campogalliano (MO) (I)
Tel. +39 059 2551150
C.F. - P.IVA - R.I. 04343730281
R.E.A. MO 370886
Capitale Sociale: € 100.000,00 i.v.
web: www.mtx.it – e-mail: sales@mtx.it – PEC: mtxsrl@pec.mtx.it

METEOROLOGY
HYDROLOGY
ENVIRONMENTAL MONITORING

Technical specifications

Detection distance	15m / 30m / 35m
Superficial speed range	0.02m/s … 15m/s - 0.02m/s ... 16m/s
Superficial speed resolution	0.001m/s
Superficial speed accuracy	1%
Level resolution	0.5mm
Level accuracy	± 2mm
Speed sensor beam width	Azimut: 12° Elevation: 24°
Level sensor beam width	Azimut: 5° (± 2.5°) Elevation: 5° (± 2.5°)
Sampling frequency	1 sps / 10 sps optional
Protection rate	IP68
Serial interface	1 x serial RS-485 half-duplex 1 x serial RS-232 (two wire interface)
Serial Baud rate	9600 bps … 115200 bps
Serial protocols	GLX-NMEA, Modbus
Other protocols	SDI-12
Analog output	4 … 20mA, programmable speed, level or flow
Voltage input	9 … 27Vdc
Power consumption	1,3W operative conditions — 0,235W standby
Maximum current	< 750mA
Temperature range	-40 … +85°C without heating/cooling systems
Dimensions	150mm x 200mm x 250mm

Ordering codes

Contactless flow sensor	**PCTSP042**

Technical specifications may be varied without prior notice

MTX S.r.l.
Via Zamboni, 74 – 41011 Campogalliano (MO) (I)
Tel. +39 059 2551150
C.F. - P.IVA - R.I. 04343730281
R.E.A. MO 370886
Capitale Sociale: € 100.000,00 i.v.
web: www.mtx.it – e-mail: sales@mtx.it – PEC: mtxsrl@pec.mtx.it

Ver. I.1.0 17/07/2024