

## PERMANENT INSTRUMENT

### ACTEON 2053-TU SC-T

#### New self-cleaning turbidity and temperature field transmitter

- Sturdy, watertight, easy to install
- Widescreen graphic display: instant measurements, trend line, calibration state
- Quick and simple intuitive programming
- 4-20 mA outputs, programmable relays



Technical specifications	
<b>Ranges</b>	0.0-200.0 or 0-2000 NTU/ 0.0-200 or 0-2000mg/L
<b>Measurement accuracy</b>	±1 NTU
<b>Temperature measurement range</b>	-10.00 to +50.00°C
<b>Temperature measurement accuracy (°C)</b>	±0.1 °C
<b>Casing</b>	ABS
<b>Protection</b>	IP 65
<b>Operating temperature</b>	-25°C to +55°C
<b>Dimensions (L x W x D) /Weight</b>	173 x 195 x 103mm / 1.5kg
<b>Display</b>	Widescreen back-lit graphic display: 240 x 128 pixels (108 x 58mm)
<b>Power supply</b>	230/115 VAC 60Hz, Optional: 24Vdc
<b>Max power consumption</b>	10VA
<b>4-20mA outputs</b>	2 galvanic isolation outputs (max load 700ohms): - Adjustable from 0.0 to 200.0 NTU or from 0 to 2000 NTU - Adjustable from -10.00°C to +50.00°C
<b>Relay outputs</b>	2 relays that can be configured in 2 different modes: - Adjustment in alarm mode (1 TU and 1 temperature (°C) threshold) - Adjustment in adjustment mode (2 TU thresholds)

### Fields of application:

- Turbidity is a qualitative reference parameter for the residual charge of undissolved substances.
- Turbidity monitoring in wastewater treatment structures helps to determine if these purification systems are efficient:
- Wastewater treatment (input, treatment line, sludge, output)

Simple, sturdy and reliable like its legendary predecessor, the APF series, with additional digital intelligence and leading-edge technology.

The optics are cleaned by a fast-action scraper. This is a polyurethane scraper powered by a stainless steel piston. When the scraper is at rest, it is completely embedded in its housing. This piston system (Ponsel invention) prevents fibres from getting entwined around the axle. A control unit (SNA) can be used to program how often the cleaning is to be carried out: 5 strokes every 15, 30, 60 minutes.

**SNA unit:** Electronic box for controlling the turbidity probe's self-cleaning system.

**Dimensions:** (l x w x d): 120 x 160 x 130mm

**Weight:** 0.420kg

**Materials:** Reinforced polyester with transparent cover. IP65



The ACTEON 2053 unit comes with a PONCIR-TU20-NA-10 optical infrared sensor.

### Self-cleaning turbidity sensor: PONCIR-TU20-NA-10:

**Measurement principle:** Optical absorption of infrared light,

**Regulated and pulsed emission (10Hz frequency)**

**Dimensions:** 253 x 73.2mm

**Weight:** 1kg

**Material:** PVC

**Temperature compensation (°C):** Automatic, by NTC

thermistor from +5 to +30°C

**Emission wavelength:** 880nm (infrared)

**Cable:** Multiple coated wires, polyurethane sheath. 10m standard length (up to 100m on request)

**Installation options:** *Fixed sensor-holder perch for in-pipe installation.*



- Modulation electronics system: Pre-amplification and optical feedback control integrated into the shaft of the nominal power supply sensor: Unregulated common analog voltage (6 to 12V), consumption less than 2mA under 6V.

### Temperature Sensor:

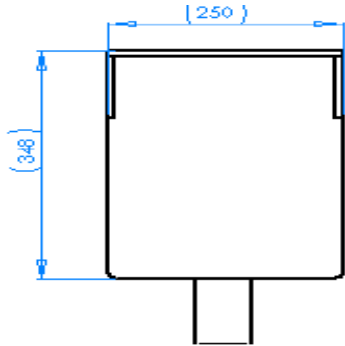
Delrin, Stainless steel, Silicone - IP68

Dimensions: Diameter 3mm (sensor), Length 115mm

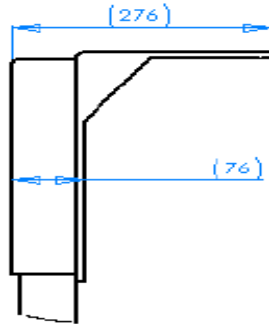
Weight: 40g

Cable: 10m standard length

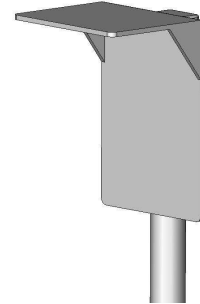
### Accessories for electronic unit installation



A (1 : 5)



B (1 : 5)



Hood mount for the ACTEON 2053 transmitter (**PON-DPCV-1** for 1 transmitter and **PON-PDPCV-2** for 2 transmitters).