



# QUADBEAM TECHNOLOGIES

~ Specialists in process suspended solids & turbidity ~

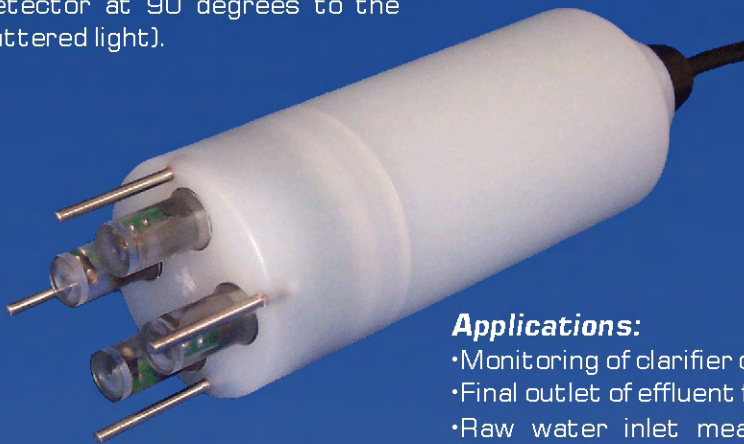
## Turbidity Series 30 Sensors

The T30 sensor is a new generation of Quadbeam process sensors, which combine both light attenuation and 90 degree scattered light measurements in a ratiometric sensor with digital communication. This technique vastly increases the sensitivity compared to sensors using just light attenuation.

The T30 sensor has two emitters and two detectors, set at exactly 90 degrees to each other. As each emitter is pulsed in sequence it produces two detector currents, one from the detector opposite the emitter (attenuation) and the other from the detector at 90 degrees to the emitter (scattered light).

Signals from each detector are fed into the microprocessor which calculates the value of Turbidity from the ratio of the two emitter/detector pairs.

A cleaner that can be used with air or water is built into the T30 sensor. Stainless steel support rods are designed to lift the sensor fingers above the floor of the drain and to protect the sensor fingers from impact.



### Applications:

- Monitoring of clarifier overflow weirs
- Final outlet of effluent from DAF plants
- Raw water inlet measurements in water treatment plants
- Surface water monitoring
- Solids loading in rivers and streams
- Product breakthrough on plate heat exchangers

## Quadbeam™ Sensors

- Ratiometric signal processing compensates for changes in the optical properties of the emitters and detectors due to ageing and surface coating.
- Effects of colour, temperature and changes in background ambient light are virtually eliminated.
- The T30 sensor is designed for use with the Quadbeam™ MSSD53 microprocessor based transmitter providing both relay and/or analogue outputs.

## SPECIFICATIONS\*

### Measuring Range:

0 to 50 through to 0 to 1000 FNU/  
FTU/NTU (Measuring ranges can vary  
according to media and particle characteristics)

### Accuracy:

+/-2% of reading

### Repeatability:

+/-1% of reading

### Temperature:

0 to 80°C operating range

### Pressure:

10 BarG

### Cable:

Polyurethane covered cable rated to  
95°C. Extension cables can be supplied  
to extend the cable length up to a  
maximum of 100M.

## MODEL NO. SELECTION GUIDE

### Body Style:

**T30-IMM** - Immersion style body

### Wavelength:

**880nm** - Standard. Other wavelengths available.

### Body Material:

**PVC** - Polypropelene body with polycarbonate  
fingers

### Cable:

**10** - Immersion sensors are supplied with a 10m  
cable as standard. Other lengths available.

### Connector:

**NC** - No Connector: Cores stripped and tinned for  
direct connection to MSSD33/53 transmitters.

**CA** - Amphenol Connector.

Sample model no: T30-IMM-880-PP-10-NC

### Optional extras:

Flanges/Adapters - to mount Immersion sensors  
into pipes or vessels, 50mm flanges or adapters  
for Triclamp, RJT and DIN11851 fittings are  
available.

REPRESENTED BY

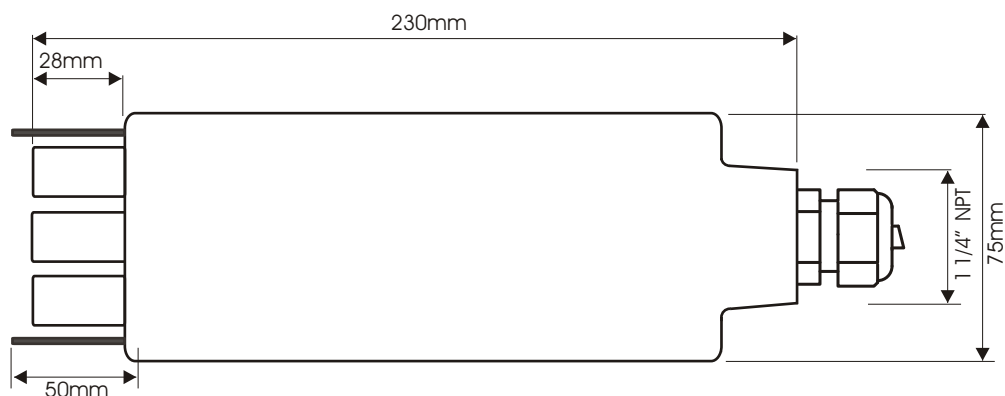
**Instrumatics**

Suite 2 . 19 Beasley Ave . Penrose . Auckland

Tel 09-526 0096 . Fax 09-526 0097

[www.instrumatics.co.nz](http://www.instrumatics.co.nz) . [helpdesk@instrumatics.co.nz](mailto:helpdesk@instrumatics.co.nz)

## T30 Immersion Sensor



\* All specifications are subject to change without notice

REPRESENTED BY -

  
**Instrumatics**  
LIQUIDS - GASES - SOLIDS *your medium - our solution*

Suite 2 | 19 Beasley Ave | Penrose  
Auckland | New Zealand  
Tel 09 - 526 0096 | Fax 09 - 526 0097  
[www.instrumatics.co.nz](http://www.instrumatics.co.nz) | [helpdesk@instrumatics.co.nz](mailto:helpdesk@instrumatics.co.nz)