

# CTD Sensor with Integrated UV Antifouling LED

A UV-LED (ultraviolet, 250-300nm @500ÅμW, light-emitting diode) is integrated into the conductivity sensor quartz cell (patent pending) of Idronaut's 305Plus CTD probe. The UV-LED sterilises the early growth of biofouling, thus eliminating environmental drift in a conductivity sensor.

The [Idronaut 305Plus CTD Probe](#) complies with the European rules which do not permit the use of Tributyltin (TBT), a very toxic and poisoning (carcinogenic) substance which has been banned by the international government agencies. It is mandatory to protect any recessed conductivity cell, which presents a very small diameter and may get contaminated or even clogged.

It also operates in polluted water and so where platinum conductivity electrodes, not covered with black platinum sponge deposit, are much preferred. When other conductivity sensors are contaminated, they require that the sensors be returned to the factory for recalibration. Instead, this one can be cleaned locally. The Idronaut seven-platinum-ring quartz conductivity cell does not require platinisation and so it can be easily cleaned with soft brush and soap without altering its original calibration.

No pump is necessary for the conductivity measurement. The Idronaut conductivity sensor is a unique flow-through self-flushed cell with seven platinum ring electrodes and, because of its big internal diameter and short length, the cell does not need a pump (even for high-accuracy measurements) as it is easily self-flushed during profiles.

The sensor can accurately measure salinity in a small glass of water (less than 200ml) and has an integrated memory of 2GB storing up to 60 million datasets (CTD + date & time). The 305Plus CTD uses one rechargeable battery (or 3 AA alkaline batteries). The device has a low weight of 3kg and a compact container design with a shoulder strap.

- [Idronaut 305Plus CTD Probe on Geo-Matching.com](#)