

## iCG | intelligent Contents Gauge

### Bell emergency on-board gas monitoring system

**COMMERCIAL DIVE SYSTEM PRODUCTS**

### Key Features:

- High accuracy monitoring of bell emergency gas supply levels
- Increases safety for SAT divers
- Reduces lost time or reportable incidents
- Field proven technology
- Integrated or stand-alone system
- Upgrades or new build systems
- Fully compliant

### Product Overview:

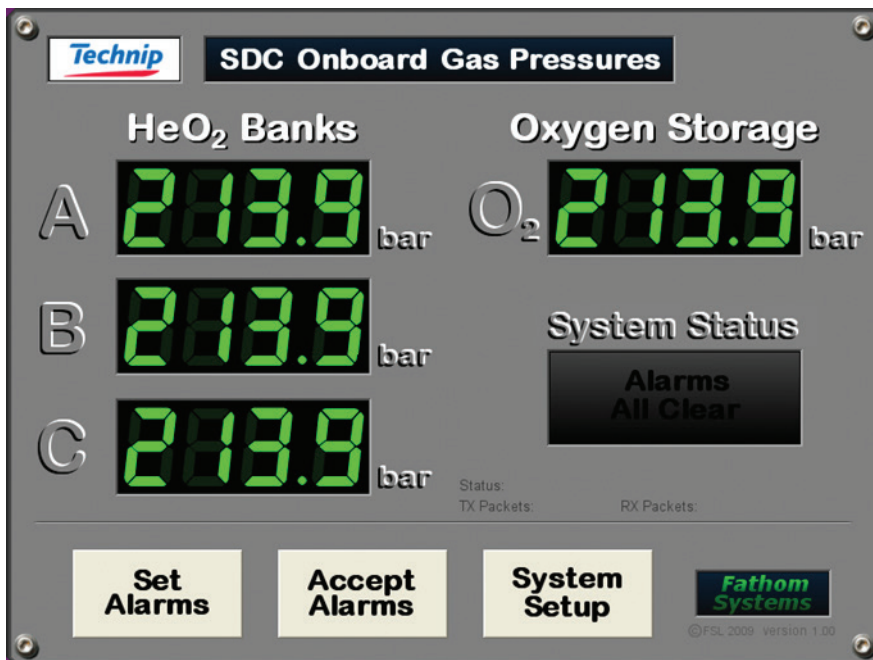
The intelligent Contents Gauge (iCG) monitors the pressure of bell mounted emergency gas cylinders and transmits this information to the surface in order to immediately detect any loss of gas.

Saturation divers depend upon surface supplied breathing gas when in the water. If the surface supply fails, there is an automatic changeover to a bottled emergency gas supply carried on the bell. If the emergency supply is depleted, safety factors are reduced and expensive downtime can be incurred while the bell is recovered and the emergency gas bottles are recharged.



In order to alleviate this, the iCG is offered as a reliable monitoring solution. The iCG can be operated in either stand-alone mode with dedicated PC and monitoring software, or as an integral part of a Fathom Diver Monitoring System (DMS), an Intelligent Bell Instrumentation System (iBIS), or a telemetry system.

The iCG measures three high-pressure heliox bottle pressures and one oxygen bottle pressure. These measurements are transmitted to and displayed in the Dive Control room.



Audible and visual alarms alert the supervisor to any loss of pressure and allows appropriate remedial action to be taken. The iCG can be supplied as a stand-alone system comprising a bell-mounted pod, topside touch-screen panel PC, topside interface unit and interface cables.

The topside interface unit contains an isolated RS485 driver and a power supply for the bell unit, including a dedicated line insulation monitor.



### iCG Bell mounted pod specifications:

- Onboard gas pressure range (HeO<sub>2</sub>) – 350 Bars, helium tolerant pressure transducers
- Onboard gas pressure range (O<sub>2</sub>) – 250 Bar, O<sub>2</sub> clean transducer
- Power supply – 24V DC ±20%
- Telemetry to surface – RS485 via 1 x TSP (optional RS232 for iBIS)
- Depth rating – 1000 metres external
- Dimensions – 250mm nominal height x 99mm diameter
- Housing material – 316 stainless steel
- Electrical connector – Souriau Jupiter REC-M-10MT-07-20
- Safety relief valve – 1 bar internal protection, 6000MSW external
- Pressure pipe connections – No.4 JIC (brass orifice fittings)
- Weight – 3.3kg in air, 2.5kg in water