

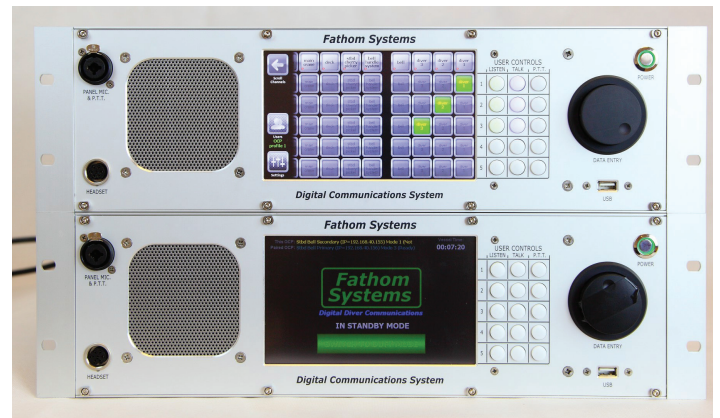
Hyperbaric Tunnelling Digital Diver Communications System



COMMERCIAL DIVE SYSTEM PRODUCTS

Key Features:

- Unrivalled audio performance
- Fully digital audio processing
- Advanced helium speech unscrambler
- HMI touchscreen interface
- Optional fibre-optic networking
- Automatic duty/standby changeover
- Stand-alone or integrated system
- Scalable - 3 channels expandable to 15



Product Overview:

In an increasingly challenging world, there is now a requirement for specialist communications equipment in the hyperbaric tunnelling sector to which Fathom Systems supply via partner company IHC Hytech - a leading supplier of high-end hyperbaric tunnelling shuttle and living chamber systems.

The Fathom Systems DDCS is often the industry preferred system of choice for the demanding offshore saturation diving industry and can be regarded as being at the forefront in helium rich environment communication equipment.

It therefore lends itself nicely to this specialist sector where the equipment demands are increasing as the projects go deeper. This requires the 'pressurised' workers to use helium rich breathing gasses thus requiring an 'unscrambler'.

The DDCS is a high end voice communications system for use in commercial diving applications. The modular system ranges from a simple 3-channel stand-alone unit to a complex multi-channel system, spread over a number of separate interconnected units.



The DDCS is based around a 3U 19" system chassis), into which are plugged a number of modules, each enclosed in a fully screened and protected housing. The system chassis can be mounted in any suitable rack location and does not need to be located at the Master User's control panel (as with existing Comms equipment). It is controlled by a dedicated Operator Control Panel (OCP) unit. The OCP can be mounted local to the System Chassis or remotely on a separate User's control stand.

The 'Master' User is typically a Dive Supervisor (Dive Control) or a LSS/LST for SAT Control chamber comms applications. The remote

users can be in-water divers, divers in the chambers or any other personnel located at a remote outstation (e.g. on-deck personnel, crane operators etc.). In this instance the Supervisor is a combined Dive Supervisor/LSS/LST with the 'Saturation workers' often in a dangerous Bentonite environment between the TBM (tunnelling boring machine) and cutting head.

The system is type-tested in accordance with the requirements of DNV OS-D202 and OS-E402, ensuring compliance for EMC, shock, vibration, temperature and humidity.

Electrical

- 240V AC @ 50-60HZ (SYSTEM CHASSIS)
- 24V DC @ 2A (OCP)

Mechanical

- Integrated OCP – 19" x 3U x 362mm
- Non-integrated OCP – 19" x 3U x 302mm
- Stand-alone OCP – 19" X 3U x 197mm

HMI

- Ergonomic 8.4" user interface panel using touch-screen technology

Software Features

- User friendly 'Bus' channel selection
- Extensive technician configurations
- Detailed diagnostics and logging tools
- Clear colour coded graphical representations
- Password Protection & Supervisor Login
- Stored preferred system settings
- USB Interface
- Fully configurable settings

Optional Fibre

- Single Mode 9/125/250