

## Combat Systems Highway Interface Unit

To meet the new challenges and threats facing modern naval operations, the design of Naval Combat Systems is increasingly moving towards using standard COTS network equipment, based on open architecture protocols.

This will allow flexibility of interconnection between equipments, and the easy incorporation of enhancements and new capabilities

In order for new systems to be integrated easily and quickly onto existing platforms using the current network infrastructure, an interface unit is needed, and J+S Ltd have produced a range of Interface Units based on the Communications Unit Mk3 (CU Mk3). The CSH Interface Unit, is a standalone unit that provides new systems with an Ethernet Interface onto the Combat System Highway, which is a high integrity LAN based on UK Defence Standard 00-19

The CSH Interface Unit contains a CU Mk3, power supply and associated connections enabling a Member System to quickly connect to the 00-19 based Highway using an Ethernet connection.

The CU Mk3 provides the Def Stan 21-24 Part 5 Ethernet interface that is provided via a ruggedised RJ45 connector on the back of the unit. Software Drivers are also available that implement the Def Stan 21-24 Part 5 Ethernet interface and provide the Def Stan 21-24 Part 6 API.



The Interface Unit can be supplied in an off-the-shelf 2U or 4U 19" CE marked rack mountable enclosure or custom designed enclosures can be provided to suit specific needs.

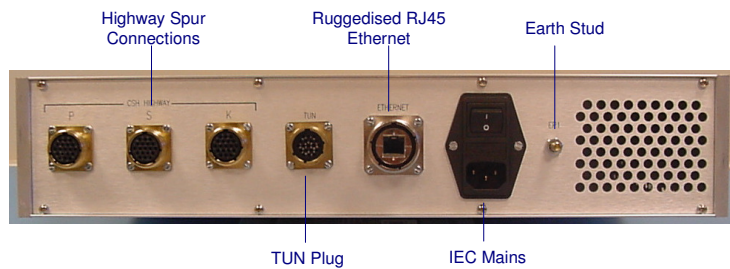
The CU Mk3 PEC can also be supplied stand-alone for inclusion in Member System enclosures.

# Specifications

## Combat Systems Highway Interface Unit



Interface Unit Front View



Interface Unit Rear View  
(Showing CSH and ruggedised RJ45 Ethernet connections)

### FEATURES

Typically, the Interface Unit will provide the following functions:

| Feature                            | Detail   |
|------------------------------------|--|
| CE marking                         | The interface units are CE marked to BS EN 60950   |
| Communications Status              | Monitors own, other systems and host communication status.   |
| Time Synchronisation               | Handles CSH System Time maintenance and makes it available as required to the Host System.               |
| Message Transmission and Reception | Handles all CSH transmission and reception protocols (Def. Stan 00-19), Def. Stan 21-24 Part 5 & Part 6. |
| Host Interface                     | Presents a defined open standard software interface to the host system (e.g. TCP/IP).                    |
| Specifications                     | Detail   |
| Dimensions: (W x D):               | 482 x 400 mm (2U in a 19 inch rack mounting)   |
| Mass:                              | 7kg (2U rack mounted variant)  |
| Power Requirements:                | 110 – 230 VAC, 50-60Hz, 500VA  |
| Environmental:                     | Ambient temperature 0 – 40 Deg. C Humidity Max 70 %  |
| EMC:                               | BS EN 55022 and BS EN 55024  |
| Host Input/Output:                 | Ruggedised Ethernet connection (RJ45) socket   |
| CSH Input/Output:                  | Pattern 608 connectors on rear panel to accept CSH spur cables   |

