

### C Command

### Engine monitoring that puts you in control



### Engine information at your fingertips

Cummins offers a modular panel system with a selection of display options designed to help marine operators protect and enhance engine performance and manage costs.

All components of the C Command system are designed for rugged marine environments. This means enclosures are built to combat vessel vibration, humidity and ambient conditions in both the pilot house and engine room. Each display is easily configured and allows for flexible data presentation. During development, focus was placed on designing quality displays that are readable in variable lighting conditions.

The information displayed by the panels provides insight into engine operating conditions such as percent load, fuel consumption\*, running hours and temperatures, which can be used to locate the most efficient operating point.



Additionally, premium digital displays provide instantaneous access to fault code descriptions, troubleshooting tips and maintenance advice. This information is invaluable to any operator who wants to maximize profits by operating at the best possible efficiency.

\*The values of displayed parameters for fuel consumption and load (or power) are not absolute. Tolerance varies, but is generally less than +/-5% when operating within 30% of rated power.



# Cost-effective monitoring for Quantum Series engines 19 to 60 liters

### Simplified installation with a single interface

All connections on Cummins Quantum System engines are centralized in a customer interface box, which helps simplify vessel installation. The CIB contains all ECM connections, start/ stop logic, emergency stop button and OEM connections. From the customer interface box, engine data can be viewed on the C Command panel system or sent to a centralized vessel management system via J1939 datalink or Modbus (Elite and Elite Plus systems only). Additionally, each component is designed for complete integration with the engine and ease of installation with "plug and play" capability.

#### **C** Command

The C Command basic system offers the flexibility to function with or without an engine room panel and features a variety of display options to ensure engine data is easily accessible.

#### **Customer Interface Box Features**

- Customer interface for all wiring
- Emergency stop button
- Main circuit breakers
- Start/stop functionality
- IP66-rated box designed for operation in harsh engine room environments



#### **Engine Room Panel Features**

- ED-3 reads all engine data from the ECM and displays information in text and graphics. Includes fault code logging with text description
- Soft buttons control start/stop as well as alarm indication and acknowledgement
- Enclosed in an IP44-rated box designed for operation in harsh engine room environments

#### **Remote Options**

- ED-3 display to monitor critical operating parameters and fault codes
- Gauge instrument panel provides fault code readout through a digital display on the tachometer
- Soft button control panel for start/stop and alarm acknowledgement
- Switch panel available to engage electronic features, including alternate idle, engine protection override and intermediate speed control

## Advanced monitoring for Quantum Series engines 19 to 95 liters

#### **C** Command Elite

C Command Elite offers additional functionality and monitoring over the C Command system with the added benefit of easy-to-read, customer configured, color displays.

The Elite system can include up to three remote panels and may be complemented by an ED-3 display in areas where only basic monitoring is required.

#### Customer Interface Box Features

- Includes integrated control panel
- Full color text and graphics in menu format
- Multiple languages and configurations may be saved to accommodate multinational crews
- Stores a comprehensive history of alarms and faults for more efficient troubleshooting and service scheduling, easily downloaded via Ethernet connection
- Capable of supporting customer-supplied temperature, pressure and switch inputs

#### **Remote Panel Features**

- Large, configurable touch screen features superior visibility even in direct sunlight
- Can simultaneously monitor and control up to eight engines

#### **C** Command Elite Plus

C Command Elite Plus utilizes the same displays for both main station and remote monitoring as the Elite system, but also includes most Classification Society-mandated sensors, alarms and shutdowns. The result is a globally supported, fully classed engine and safety & alarm system that protects against the substantial risk of noncompliance. The Elite Plus system is fully approved by ABS, BV, DNV-GL, KR, LR and RINA.

C Command Elite Plus is now available on the QSK95. In addition to the above functionality, the CIB is larger to accommodate higher power capability and meets additional class requirements for this engine size. There is additional I/O available for vessel integration and customization. At launch, the system will be approved by ABS, with additional society approvals under review.



# C Command monitoring for Quantum Series 6.7 and 11 liter engines

#### **C** Command HD

C Command HD and HD Elite Plus are available for the QSB7 auxiliary and the QSM11 propulsion and auxiliary engines. Both systems offer simplified installation and include local and remote control options.

C Command HD, the cost-effective basic system, comes standard with digital displays and includes an engine room panel. Customers also have the choice of up to two remote control panels and two electronic digital displays.

R R R

C Command HD Elite Plus, the type-approved system, includes Classification Society-mandated sensors, alarms and shutdowns. Easily integrated to vessel networks, this system comes standard with full color displays and optional remote control panels.

# C Command monitoring for K Series engines 19 to 50 liters

#### **C** Command **PT**

Operators can have all the benefits of modern engine monitoring on mechanical and Centrycontrolled products with Cummins C Command PT panels. Based on C Command architecture, this modular panel system includes a selection of display options designed to enhance K Series engine performance and manage costs.



C Command PT Elite Plus includes Classification Society-mandated sensors, alarms and shutdowns. The result is a globally supported, fully classed engine and safety & alarm system that protects against the substantial risk of noncompliance. Certification is available from ABS, BV, DNV-GL and LR.

Available exclusively with C Command PT Elite Plus, Cummins Fuel Consumption Monitor enables accurate, reliable monitoring within +/-3% while providing trip, total and instantaneous measurements on digital remote datalink.

#### Remote Options

- Control Panel (CP)
- Electronic Digital Display (ED-3)
- Remote Control Panel (RP)

#### Available Upgrades

- Switch panel
- Gear oil pressure

# C Command for Quantum Series propulsion engines 6.7 to 11 liters

#### **C** Command Connect

C Command Connect leverages existing engine capabilities and throttle shift systems, including third party systems, making it easy to upfit existing boat designs. C Command Connect utilizes J1939 protocol to allow full access to engine data and fault information. The system supports J1939 and N2K data interfaces to allow operators the flexibility of using the Cummins ED-4 display panel or third party gauges and displays for remote monitoring. Operators can simultaneously monitor multiple engines at multiple display locations.

Like the original C Command system designed for Cummins QSK19, QSK38, QSK50 and QSK60 engines, the C Command Connect systems utilize a customer interface box (CIB) to centralize vessel connections. The basic and Premiere applications include all harnessing, user interfaces and optional ED-4 display panel with 3.5" color display as well as N2K gateway capability for remote monitoring.

C Command Connect Premiere provides additional functionality and monitoring over the

basic system. It includes a CIB with integrated ED-4 display panel, N2K output and alarm indication to the helm. Vessel sensor capability allows operators to monitor fuel level, gear oil pressure and temperature, and rudder angle.

#### **Tested and Supported**

Cummins delivers quality into all products, not just the engine. Like every component on our marine engines, the electronics and panels are subject to extensive lab and field testing to ensure best in class reliability and durability.

All C Command panels are fully supported by the Cummins global service network. Plus, all are covered by a standard comprehensive one year warranty that is both transferable and valid at any Cummins authorized marine outlet worldwide.



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