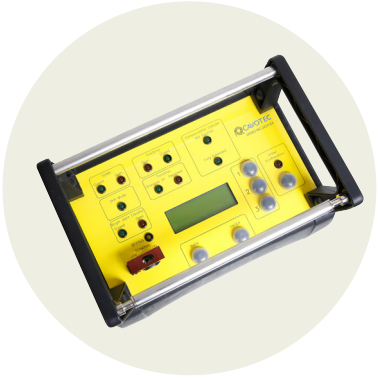
Datasheet

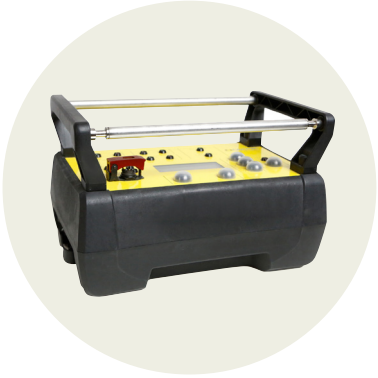
Radio Remote Control Systems

MC-3200/MC-3300 EX

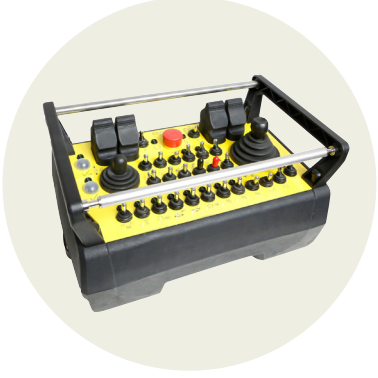
April 2017 - DAS-RRC-06



MC-3200 EX with display



MC-3200 EX side view



MC-3300 EX design according to customer requirements

Cavotec wants to contribute to a future world that is cleaner, safer and more efficient by providing innovative connection solutions for ships, aircraft and mobile equipment today.

For more than 30 years, Cavotec has engineered advanced radio remote control systems in close co-operation with customers worldwide.

MC-3200/MC-3300 EX radio remote controls are advanced systems for ports & maritime, mining & tunnelling and other hazardous industrial applications.

Benefits

- Engineered to global standards, MC-3200/ MC-3300 EX radio remote control systems are ATEX and IECEx tested, approved by Norwegian certification body NEMKO, and have INMETRO and EAC certifications.
- Simplex and duplex communication compatible.
- Up to 32 digital and 13 analogue functions.
- Units enable operators to receive messages, set alarms and receive status indications.
- Entirely EX functional, our receiver units can be fitted with serial interface or industry standard analogue and digital I/O, and installed with EX approved enclosures.
- Long life time rechargeable batteries can be replaced within EX zones.
- Operator terminal layouts are configured according to application and customer requirements:
  - Fitted with analogue or digital joysticks, pushbuttons, toggle switches and rotary switches.
  - Safety features with start-stop push-button, On/Off switch.
  - Optional: LEDs and displays for feedback information, cable back up

Applications

- Oil skimmers and oil recovery systems.
- Land based drilling rigs, oil and gas platforms, offshore cranes and winches, oil skimmers, petro chemical plants.
- Coal mining machines, underground mining equipment.

CAVOTEC®
We connect the future.

Technical characteristics

Terminal MC-3200/MC-3300 EX

- Complete operational control with unique signal encoding prevents unintended operations.
- Activity check on start up to prevent unintended operations.
- Stop relay activation in 50 mS.
- License exempt frequency with low power outputs; European ISM band width 418-870 MHz (other frequencies available on request).
- Digital and analogue feedback.
- PLC functionality for interlocking, sequencing and timing functions programmed directly without additional hardware.

Receiver Unit

- The MC-IRX receiver unit is highly flexible as it can have multiple digital and analogue inputs and outputs.
- Easy use with direct connections to most available fieldbus systems: ProfiBus, ModBus RTU, CANopen, Device Net, ModBus Plus, ModBus TCP, Ethernet IP.
- Back up solution with cable connection for programming and control.
- Multiple terminal and/or multiple receiver unit systems possible, e.g. for tandem operation.

General data

MC-3200/MC3300 EX Terminal	Approved for Ma, Gb and Db (Mining, Zone 1, ATEX and 21), Gas group IIB and Dust group IIIC, Temperature class T4
Digital functions	Depending on configuration
Analogue functions	Depending on configuration
LED	Red, Green, Yellow, Blue
Display	Character display
Battery	Default battery package 7,4V / 1100 mAh Li-Ion, intrinsically safe
Recharge time	1hour
Battery charger	12-24VDC, 110-230VAC
Operating time	Approx. 8-12 hours
Dimensions	280 x 180 x 180 mm (11,02 x 7,08 x 7,08 inch) & 340 x 230 x 185 mm (13,38 x 9,05 x 7,28 inch)
Weight	From 2 to 4 kg (4,4 to 8,8 lbs)
IP	IP65 standard, IP66/67 optional
Temperature	-30°C to +60°C, -22°F to +140°F
Operating distance	Approx. 200m line of sight
Frequency	418 MHz – 870 MHz

Approvals & Standards

Cavotec radio remote control systems comply with a variety of international rules and regulations. All systems are CE marked and can be used with our FCC Part 90 approved radio. The systems are designed in accordance with the Machinery Directive and comply with IEC 60204 and ISO 13849. In addition we have a wide range of compliant radios that can be used in type approvals of systems for specific countries worldwide.