

Radio Remote Control Systems

MC-3-5/MC-3-6



Operator terminal MC-3-5



MC-3-5 fitted with one multi-axis joysticks



MC-3-6 customised layout and legend plate

Cavotec is a global engineering group that manufactures power transmission, distribution and control technologies that form the link between fixed and mobile equipment in the Ports & Maritime and Airports & Industry sectors.

One of Cavotec's eight Centres of Excellence, Cavotec Micro-control engineers advanced radio remote control systems in close co-operation with customers worldwide.

Benefits

- Both units share the same platform, and the MC-3-6 offers greater functionality.
- The MC-3-6 uses a twin-battery connection that allows them to be replaced without switching off the terminal, (Hot Swap), which is essential for continuous operation.
- Digital and analogue functions.
- Suitable for the harshest of environments.
- High mechanical and chemical resistance due to moulded housing design.
- Ergonomically designed for all types of long distance operations.
- Operator terminal layouts are configured according to application and customer requirements:
 - Can be fitted with analogue or digital joysticks, push-buttons toggle switches and rotary switches.
 - Safety features with start-stop push-button, On/Off switch.
 - Optional: LEDs and ASCII / graphical displays and cable back-up.

Applications

- Cranes (overhead, portal, tower, loading arms, hydraulic, L.A.R.S), ship davits.
- Off shore: oil skimmers, drilling rigs, catwalks, raiser chute, roughneck, BOP, ROV systems, pipe handlers, A-frames.
- General industry: forestry winches, recovery vehicles, concrete pumps, conveyor belts, fire fighting systems, fuelling systems, theater and stage equipment.
- Mining: drag lines, shovels, stackers, reclaimers, overhead cranes, crushers.

Technical characteristics

Terminal MC-3-5/MC-3-6

- Complete operational control with unique signal encoding prevents unintended movements.
- Activity check on start up to guarantee safe operations.
- Stop relay activation in only 50 mS.
- Digital and analogue feedback.
- Redundant radio solution.
- License free frequency with low power outputs.
- 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

Digital functions	Depending on functionality
Analogue functions	Depending on functionality
LED	White, Yellow, Green, Red, Blue
Display	Character display or graphical display
Battery	Rechargeable 7.2 V 1700 mAh Li-Ion
Battery charger	12-24 VDC, 110-230 VAC
Operating time	Typical 20 hours, depending on configuration & temperature
Dimensions	230 x 175 x 160 mm (9,05 x 6,88 x 6,29 inch) & 330 x 220 x 200 mm (12,99 x 8,66 x 7,87 inch)
Weight	1.5 kg – 3.5 kg (depending on configuration)
IP	IP65 standard, IP66 optional
Temperature	-25°C to +60°C, -13°F to 140°F
Operating distance	Approx. 200 m line of sight
Frequency	According to local authority guidelines

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.