# Sales Specification for IRVCD™ Vertical Crane Detection System with BatBak™ (Battery Back Up System), Audible & Visual Warning

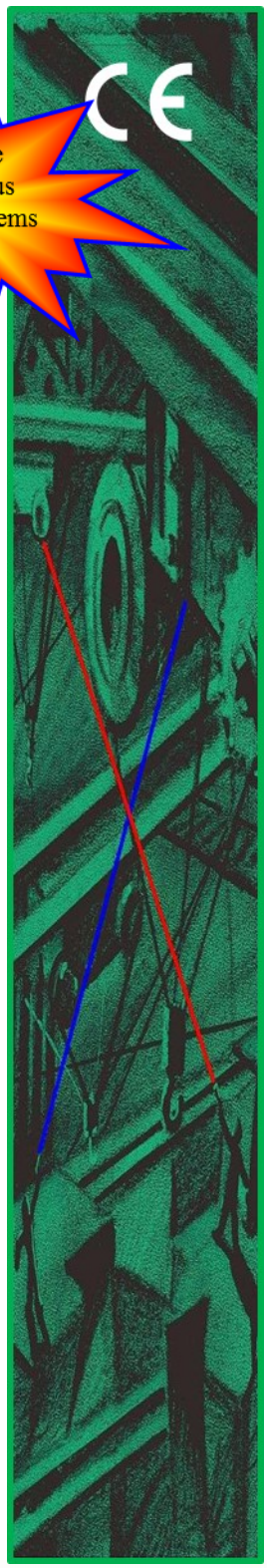
Buy British
Buy COMMANDER™


IRVCD™ Enclosure


IRTxE™ & IRRxE™

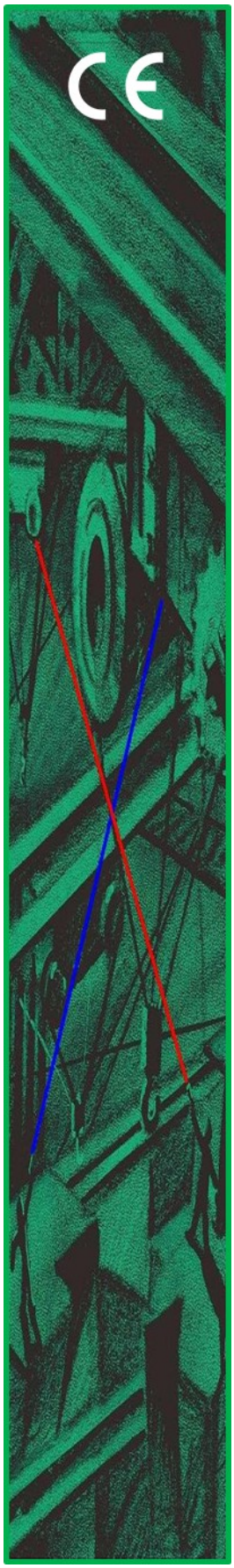

BatBak™

IRVCD™ Vertical Crane Detection System (door removed for visual purposes)



The **COMMANDER™** **IRVCD™** Vertical Crane Detection System for collision avoidance uses security coded infra-red signals to communicate vertically between cranes on 2, 3 or more gantry levels. Upper and Lower systems have similar hardware and features. All upper crane systems (above level 1) incorporate positional hook monitoring (limit/device not supplied) This monitoring feature provide a level of automation to the crane operating performance. When operational, if an upper crane has one or more hooks lowered then this 'upper' crane and any crane on lower levels which approach the intrusion zone will be inhibited from bridge forward/reverse travel motion. This means a crane on level 4 will communicate with a crane on level 1, then others as and when they appear within the intrusion zone. All systems have a closed security loop incorporated to ensure signalling is maintained and has not failed. Power for each **IRVCD™** crane system is derived from a separate AC supply which remains isolated and active when the normal crane power supply is switched off for maintenance or other purposes. In the event a full power loss, the systems **BatBak™** (battery back up system) (built in) ensures a continuous given period power supply and will maintain presence status and continue to signal cranes above and below its own level. In the event of full power loss to the crane the system will go into visual and audible alarm mode to signal personnel of the condition. A key is required to silence the activated system. This signalling can be repeated by radio link to a ground based administration location. The **IRVCD™** system is supplied 'scheme ready' to the installer or OEM.

# Technical Details for
# IRVCD™ Vertical Crane Detection System with BatBak™ (Battery Back Up System), Audible & Visual Warning


## IRVCD™ Vertical Crane Detection 'Full Scheme' Specification

| | |
|---|---|
| Safety | Relays open if failure & BatBak™ battery back up option |
| Enclosure | Sheet Steel with hinged door and hood (stainless steel option) |
| Finish | Stove enamelled in Grey |
| Dimensions | 600W x 600H x 200D (mm) |
| Weight | 40 kg (variable) |
| Cable ports provided | Multiple porting for power and signalling hardware |
| Data Cables | Fixed length Data power cables supplied |
| AC Voltage Version | 42V-230V AC (3 formats) (DC to order) |
| Environmental | -10°C to +55°C IP54 |
| Volt Free Relays | Volt free contacts for interface to forward & reverse directions |
| Power & Interface | Plug & socket I/O terminal connectors |
| Diagnostics | LED's |
| Security Codes | Factory set codes |

## IRTxE™ Transmit Heads (Forward & Reverse Directions)

| | |
|---|---|
| Enclosure | Folded & Welded sheet metal for strength |
| Finish | Powder coated in Black |
| Dimensions | 205W x 125H x 80D (mm) |
| Cable ports | Ready fitted for Data and low power connectors |
| Weight | 0.980 kg |

## IRRxE™ Receive Heads (Forward & Reverse Directions)

| | |
|---|---|
| Type (extruded frame) | 140° (under-crane mount) anodised Red |
| Operating Range | Restricted to suit zoning & crane heights |
| Environmental | -10°C to +55°C IP55 |
| Connection | Twin BNC co-axial ports |

## Data Cables (supplied for interconnectivity for transmitter & receiver)

| | |
|---|---|
| Transmitters | Data & Power cables ready assembled to fixed lengths |
| Receivers | Co-axial cables ready assembled to fixed lengths |

## BatBak™ Battery Back Up System (given period )

| | |
|---|---|
| Enclosure | Folded & welded sheet steel for strength. |
| Finish | Powder coated in Verona (Green). |
| Dimensions | 205W x 125H x 80D (mm). |
| Weight | 3.135 kg. |

## EI™ / RD-O5™ Infra-Red Over-ride System - Option

The EI™ / RD-O5™ Infra-Red 'conditional' travel over-ride system is designed for use by a second person (supervisory/banksman) involved in a lifting operation to safely over-ride an automatic zone inhibit by a COMMANDER™ Crane Detection System (collision avoidance). The hand held transmitter features AutoStart™ and operates using a specific common code periodic defined sector transmission system. The EI™ Infra-Red transmitter must be secured in a safe place when not in use and only accessible for use by authorised persons. This system is a safety tool designed to ensure a lifting operation is effectively controlled within a 'normally' inhibited area. See EI™ / RD-O5™ brochure for full specification.



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