coto
for perfection

PRODUCT CATALOGUE

Crane Control & Safety Solutions

Radio remote controls, overload and safety systems, busbars, inverters, limit switches and electrical crane equipment.



01 RADIO REMOTE CONTROL SYSTEMS
02 OVERLOAD CONTROL SYSTEMS
03 ANGLE LIMIT SENSORS
04 ANTI-COLLISION SENSOR
05 CRANE BUSBAR SYSTEMS
06 CRANE INVERTERS
07 LIMIT SWITCHES
08 ELECTRICAL CRANE EQUIPMENT
09 CRANE SAFETY LIGHTS

ABOUT COTO

Engineered for Perfection



All of our products are designed with the knowledge we have gained over more than 20 years, and with the capability and quality to meet customer expectations in the market. We started selling our crane control products under the name **COTO for Perfection**.

Alongside our crane remote controls we started producing crane inverters and Hololight projectors. All research and development work and every customer-specific adaptation is carried out in-house by our qualified team.

Every new product is tested and approved in the field before it is offered to our customers. You receive a high-quality product at an economical price – the optimum solution – and fast, high-quality after-sales service from our experienced experts. No surprises, no unexpected invoices.

20+
Years of know-how

9
Product groups

2 years
Warranty on remote controls

R&D
In-house development

PRODUCT CATALOGUE

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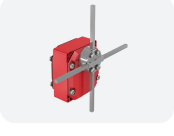
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SECTION 01 / 09

Radio Remote Control Systems

Industrial wireless remote controls with 4, 6, 8 and 10 buttons, single or dual speed, developed and programmed in-house.

CRC | CRH-41 | CRC-42 | CRC-61 | CRC-62 | CRC-81 | CRC-82 | CRC-101 | CRC-102

WIRELESS REMOTE CONTROL SYSTEM

CRC

Wireless Remote Control System



4 · 6 · 8 · 10 BUTTONS · LCD VERSION

ORDERING CODE

CRC	–	6	–	1	–	2	–	M	–	1	–	J
PRODUCT FAMILY		BUTTONS		SPEED		FUNCTION		COMMUNICATION		BATTERY TYPE		OPTIONAL INPUT
CRC: wireless remote CTX: transmitter CRX: receiver		4 6 8 10		1: single speed 2: dual speed		0: standard 1: A/B/A+B 2: tandem 3: master / slave 4: controlled handover		0: standard I: 4–20 mA V: 0–10 V M: Modbus		0: alkaline 3×AA 1: rechargeable 3×AA		O: overload W: wind sensor J: gyroscope

GENERAL DESCRIPTION

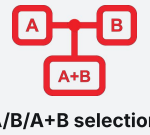
The CRC series provides wireless remote control for cranes and industrial machinery. It allows the operator to follow the working area from a suitable position and to control equipment movements safely.

Configurable buttons, functions and control options make the series suitable for overhead cranes, gantry cranes, lifting equipment and industrial machinery. Application-specific transmitter and receiver options cover standard installations as well as project-specific control requirements.

KEY TRANSMITTER FEATURES

- GRADE II drop and impact protection; industrial ABS housing with rubber coating
- Independent fuse for every axis movement
- Four relays for the hook buttons; independent second-speed relays
- After start-up the START button can be used as a dual-speed button
- Conformal-coated circuit boards resist moisture and dust

OPTIONAL FEATURES



A/B/A+B selection



Tandem



Master / Slave



Controlled operator handover

WIRELESS REMOTE CONTROL SYSTEM

CRC

Wireless Remote Control System

MAIN FUNCTIONS

- Stable two-way communication at 2.4 GHz
- Single- and dual-speed options for 4 / 6 / 8 / 10-button models
- Operates with 3×AA alkaline or rechargeable Li-ion batteries; charger optional
- 240-hour battery life; internal antenna
- Pairing a new transmitter by button combination; prevents two transmitters operating at the same time for safety
- Standby time adjustable to 5 / 10 / 15 minutes or unlimited
- Simultaneous hook, trolley and bridge movements can be enabled / disabled
- Range up to 150 m; percentage-based range limitation for safe operation
- Horn relay can be enabled / disabled for each movement
- RFID operator access control and recording of crane operation, including overloads and cycles

INPUTS / OUTPUTS & COMMUNICATION

Standard: Relay

Optional:

RS485 | RS232 | CANBUS | MODBUS RTU | 0–10 V | 4–20 mA | 2 × load cell

OPTIONAL FEATURES

- Overload function with load cell input
- Export individual or total weights to Excel or PDF
- Real-time recording of lifting cycles, weights and overloads
- View, record, print or transfer weights on the handheld unit (via the COLM app)
- Communication with drives and other equipment via Modbus RTU
- Real-time logging of overvoltage, overcurrent, overheating and inverter faults
- Assignment of 3rd or 4th speeds for loads at or below the set rated load

TECHNICAL SPECIFICATIONS

Receiver supply voltage	12 VDC / 24–250 VAC/DC; 6 VA
Control relays	Up to 22
Response time	≤ 500 ms
Control range	150 m in open area, internal antenna
Communication	2.4 GHz GFSK; 128 channels
Relay outputs – single speed	4 / 6 / 8 / 10 (4 / 6 / 8 / 10 buttons)
Relay outputs – dual speed	7 / 10 / 13 / 17 (4 / 6 / 8 / 10 buttons)
Optically isolated digital inputs	2
Serial ports	RS485, RS232
Baud rate	1200 ... 115200 bit/s
Decimals • display increments	0÷4 • x1 ×2 ×5 ×10 ×20 ×50
Digital filter	0.25 ÷ 3 Hz
Humidity (non-condensing)	85 %
Storage temperature	-30 ... +60 °C
Operating temperature	-20 ... +55 °C

KEY RECEIVER FEATURES



- One receiver suitable for all transmitters
- Two series-connected 16 A safety relays
- Status LEDs and Turkish/English fault labels (customisable to the customer's language)
- Wiring diagram inside the cover and on the back of the unit
- Vibration-resistant screw-type cable terminals
- Standard vibration mounts with 3 × M10 screws
- Standard 18G0.22 mm cable, 3.5 m, with cable gland
- IP65 ingress protection

COMPLIANCE

CE conformity for European Union countries

PL d — Category 2, PL d according to EN ISO 13849-1; corresponds to SIL 2 according to EN 62061

Pb — Lead-free

RADIO REMOTE CONTROL

CRH-41

4-Button Single-Speed Crane Remote Control



COTO's CRH-41 is a practical wireless remote control that makes your crane operations even more efficient.

Thanks to its single-speed operation, the crane can be controlled easily with 4 buttons. Developed by our Turkish engineers at our R&D centre, this model provides reliable wireless communication and further optimises your industrial operations.



RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	4 single-speed buttons
Dimensions	180 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 ... +70 °C

RADIO REMOTE CONTROL

CRC-42

4-Button Dual-Speed Crane Remote Control



The CRC-42 is a wireless remote control that takes your crane operations further with its dual-speed function.

With its 4 buttons, both horizontal and vertical movements can be controlled with ease. This model has been carefully developed by our Turkish engineers at our R&D centre and offers an ideal solution for industrial businesses.





RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	4 dual-speed buttons
Dimensions	180 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 ... +70 °C

RADIO REMOTE CONTROL

CRC-61

6-Button Single-Speed Crane Remote Control



Standing out with its competitive price, the CRC-61 is our 6-function crane remote control.

Manufactured with advanced German technology, it features an ergonomic design. In addition to the 2-year warranty, we also guarantee fast service.



RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	6 single-speed buttons
Dimensions	180 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 ... +70 °C

RADIO REMOTE CONTROL

CRC-62

6-Button Dual-Speed Crane Remote Control



A compact dual-speed remote control for big jobs: the CRC-62 is our 6-function crane remote control.

It complies with EN 13849-1 safety standards and has IP65 protection. Manufactured with advanced German technology, it features an ergonomic design. In addition to the 2-year warranty, we also guarantee fast service.



RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	6 dual-speed buttons
Dimensions	180 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 ... +70 °C

RADIO REMOTE CONTROL

CRC-81

8-Button Single-Speed Crane Remote Control



Standing out with its competitive price, the CRC-81 is our 8-function crane remote control. Manufactured with advanced German technology, it features an ergonomic design. In addition to the 2-year warranty, we also guarantee fast service.

PROGRAMMABLE FUNCTIONS

As standard, each line has 3 relays; on request we can program the unit as follows. Hook buttons can be fitted with 4 relays so that the 2nd speeds are independent:

- Trolley and bridge buttons can be programmed permanently.
- Programmable for A/B/A+B double-trolley cranes.
- All 8 buttons can be programmed as dual speed.
- On 8-button models, grab open/close buttons can be programmed as required.
- The START button can be used as a normal relay after start-up.
- The relay output that is active during every movement can be enabled/disabled by button combination.
- Linked/complex movements can be enabled/disabled by the operator or by us via button combination.
- Sleep mode starts after 10 minutes and can be disabled on request.
- Units supplied with DOUBLE START can be set to SINGLE START on request.



RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	8 single-speed buttons
Dimensions	180 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 ... +70 °C

RADIO REMOTE CONTROL

CRC-82

8-Button Dual-Speed Crane Remote Control



Our smartest crane remote control: with the i-Key function of the 8-function CRC-82 you can continue working without interruption. Its industrial plastic housing makes it more robust than ever, and it offers 400 hours of continuous operation and a button life of 2,000,000 operations.

Manufactured with advanced German technology, it features an ergonomic design. In addition to the 2-year warranty, we also guarantee fast service.

PROGRAMMABLE FUNCTIONS

As standard, each line has 3 relays; on request we can program the unit as follows. Hook buttons can be fitted with 4 relays so that the 2nd speeds are independent:

- Trolley and bridge buttons can be programmed permanently.
- Programmable for A/B/A+B double-trolley cranes.
- All 8 buttons can be programmed as dual speed.
- On 8-button models, grab open/close buttons can be programmed as required.
- The START button can be used as a normal relay after start-up.
- The relay output that is active during every movement can be enabled/disabled by button combination.
- Linked/complex movements can be enabled/disabled by the operator or by us via button combination.
- Sleep mode starts after 10 minutes and can be disabled on request.
- Units supplied with DOUBLE START can be set to SINGLE START on request.



RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	8 dual-speed buttons
Dimensions	180 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 … +70 °C

RADIO REMOTE CONTROL

CRC-101

10-Button Single-Speed Crane Remote Control



The CRC-101 is the perfect wireless remote control for versatile crane operations. Its 10 buttons offer the operator a wide range of control.

Designed by Turkish engineers at COTO's R&D centre, this model is an ideal choice for organising your work better and operating your cranes safely.



RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	10 single-speed buttons
Dimensions	220 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 ... +70 °C

RADIO REMOTE CONTROL

CRC-102

10-Button Dual-Speed Crane Remote Control



Compliant with safety regulations: the CRC-102 is a dual-speed 10-button crane remote control. It complies with EN 13849-1, has IP65 protection and operates between -25 °C and +70 °C.

PROGRAMMABLE FUNCTIONS

As standard, each line has 3 relays; on request we can program the unit as follows. Hook buttons can be fitted with 4 relays so that the 2nd speeds are independent:

- Trolley and bridge buttons can be programmed permanently.
- Programmable for A/B/A+B double-trolley cranes.
- All 10 buttons can be programmed as dual speed.
- On 10-button models, grab open/close buttons can be programmed as required.
- The START button can be used as a normal relay after start-up.
- The relay output that is active during every movement can be enabled/disabled by button combination.
- Linked/complex movements can be enabled/disabled by the operator or by us via button combination.
- Sleep mode starts after 10 minutes and can be disabled on request.



RECEIVER



CHARGING DOCK

IP65
Protection class

≥150 m
Range in open area

400 h
Continuous operation

EN 13849-1
Emergency stop compliance

TECHNICAL SPECIFICATIONS

Buttons	10 dual-speed buttons
Dimensions	220 × 65 × 50 mm
Weight	380 g
Antenna	Internal
Start	Double start
Housing material	Industrial plastic
Emergency stop	Compliant with EN 13849-1
Smart key	CRH iKey

Range	≥150 m (open area)
Protection	IP65
Button life	≥2,000,000 operations
Power supply	3 × 1.5 V AA batteries
Continuous operation	400 hours
Auto power-off	15 or 30 min
Operating temperature	-25 ... +70 °C



SECTION 02 / 09

Overload Control Systems

CLB smart crane management, load limiters, external displays and load cells for measuring, protecting, managing and recording every lift.

CLB CLL CED CWL CLP

SCM · SMART CRANE MANAGEMENT

CLB Ecosystem

Crane safety and control platform – one control unit, integrated crane management.

MEASURE

CWL and CLP sensors measure the load, CAS measures the rope angle and CWS the wind speed. These data and the digital/analog field signals are collected in the CLB central control unit.

PROTECT & MANAGE

CLB monitors overload and slack-rope conditions, supports Anti-Grab and Anti-Sway control with angle data, provides load-dependent speed control, R1–R4 relays and a 0–10 V speed output, and talks to VFDs via Modbus.

RECORD & REPORT

Black Box records overload, voltage and current values as well as operating frequency and duration with date and time. Data can be exported as PDF, CSV or Excel, printed or shared by e-mail.

SYSTEM ARCHITECTURE



FIELD INPUTS

- CWL / CLP: 2 independent load cell inputs – mV/V, 4–20 mA or 0–10 V
- CAS: Modbus / digital
- CWS: wind speed – Modbus / 0–10 V / 4–20 mA
- Start/stop and status signals via digital / analog inputs

OUTPUTS & COMMUNICATION

- R1–R4 relay outputs
- 0–10 V analog speed reference
- Modbus RTU (RS485) to the VFD; RS485/RS232 to the CED
- Bluetooth / RF option and mobile access

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

SCM · SMART CRANE MANAGEMENT

Smart Safety & Motion Control

Combined evaluation of load, angle, wind and drive data.

01 Overload protection

CLB monitors two load cells independently and calculates the total load. Thresholds in % of capacity can be set for each point and for the total: the first threshold triggers the alarm relay, the final threshold limits the lifting movement.

02 Load-dependent speed

CLB compares the measured load with the rated capacity. At suitable load levels it enables the relays of the 3rd and 4th speed stages; as the load increases it disables them. Faster work with light loads, less dynamic stress with heavy loads.

03 Rope angle control

CLB monitors the X and Y rope angle data from the CAS sensor. When the angle exceeds the set limit it warns and, depending on the configuration, limits the crane movement – reducing side-pull stress and wear on the rope, rope guide and hoist.

04 Wind monitoring

Wind speed from the CWS sensor is displayed and monitored continuously. When the warning or stop threshold is exceeded the related relay output is activated – especially valuable for cranes working outdoors.

05 Slack rope protection

When the attachment rests on the ground, CLB detects the defined negative load threshold on the tared load cell and stops the lowering command – before the lower limit switch – reducing the risk of slack and tangled rope.

06 VFD monitoring

CLB reads the drive operating status, phase currents and fault codes via Modbus. Drive-related faults are visible on CLB and the maintenance team reaches the cause faster.

07 Anti-Sway load swing control

CLB transfers rope angle and position data via Modbus to the PLC or a PLC-capable drive. Together with a suitable control algorithm these data are used to reduce load swing.

08 Anti-Grab controlled lifting

Instead of commanding 25 Hz suddenly at the start of lifting, the drive frequency is increased with a linear ramp. Smoother load pick-up limits impact loads on gearbox, wire rope and hook.

MEASURE · PROTECT · MANAGE · RECORD

Integrated crane safety in a single control unit.

MOBILE APP · FOR ANDROID

COTO COLM

Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.

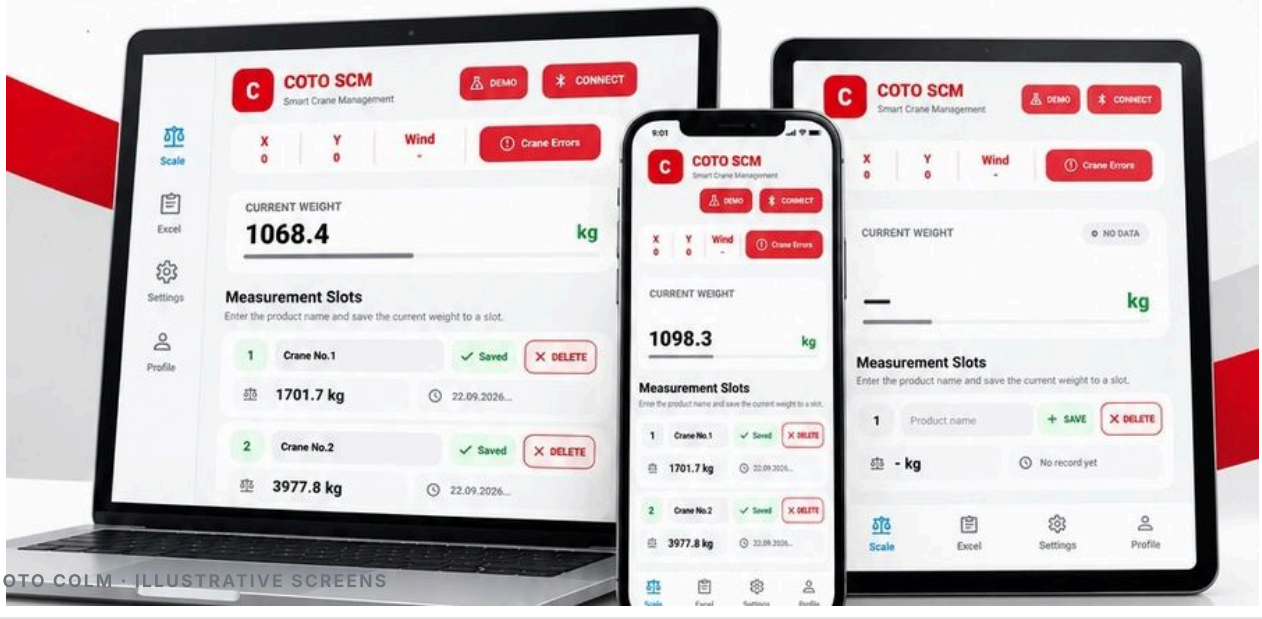
GET IT ON Google Play

Scan the QR code to download →

SCM · SMART CRANE MANAGEMENT

COTO COLM & Black Box

Visibility, mobile access and traceable reporting – from the field to the office.



COTO COLM · ILLUSTRATIVE SCREENS

COTO COLM – COTO OVER LOAD MANAGEMENT

Mobile access infrastructure for controlling CLB functions remotely via Android and iOS applications, on phones, tablets and computers.

- Calibration and tare
- Configuration of the four relay outputs
- Live load monitoring and operation visibility
- Recording, export and reporting

BLACK BOX & TRACEABILITY

Overload events, lifting cycles, weighing records and product type information are recorded in real time. Overvoltage, overcurrent, overheating and inverter fault codes are logged via Modbus communication with the frequency inverter.

Reporting the records creates a traceable database for service, maintenance and operational analysis.

EVENT HISTORY – SAMPLE VIEW

10:24:08	Load	4765 kg	Normal
11:17:42	Overload	10750 kg	Recorded
13:05:16	VFD	Overcurrent	Recorded
14:02:31	Lifting	6780 kg	Normal

TOTAL WEIGHING – SAMPLE

Date	Time	kg	Product	Status
16.09.2026	10:24	3250	Stainless	Saved
16.09.2026	11:17	1430	10 mm sheet	Saved
16.09.2026	14:02	4640	Copper	Saved

PDF · Excel · CSV · Print · E-mail

Weighing records support operation tracking and reporting; they may not be used for legal-for-trade (commercial) weighing.

MOBILE APP · FOR ANDROID

COTO COLM

Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.

GET IT ON Google Play

Scan the QR code to download →

SCM SMART CRANE MANAGEMENT

CLB

Smart Crane Management & Overload Control Unit



As a digital load limiter and transmitter, CLB combines load measurement, control outputs and communication functions on the crane in a single platform – with a 2″ full-colour TFT display and mobile app control.

CONNECTIVITY

Bluetooth · Wi-Fi · USB Type-C · iOS · Android · PC · PDF · Excel · Print

ORDERING CODE

CLB	–	1	–	1	–	2	–	1	–	M	–	1	–	J
PRODUCT FAMILY		FUNCTION		DATA TRANSFER		RELAYS		LOAD CELL INPUT		COMMUNICATION		WIRELESS		OPTIONAL INPUTS
CLB: control unit		1: overload 2: COLM mobile app 3: SCM* – coming soon		none 1: Type C		2 3 4		1 2		M: Modbus I: 4–20 mA V: 0–10 V		1: none (cable) 2: Bluetooth 3: Wi-Fi		J: angle sensor W: wind sensor

GENERAL DESCRIPTION

- Digital load limiter / transmitter for lifting systems
- Omega/DIN rail mounting on a back panel or in a junction box
- Dimensions: 106 × 106 × 43 mm (including terminal blocks)
- Setup and calibration via keypad or Android / iOS app (2″ full-colour TFT display)
- Alarm signal in the event of a load cell connection fault
- Connection of multiple units for load limiting and summing functions
- LED indicators for relay output status
- 5-key keypad

CLB FEATURES

- Load limiting through alarm and pre-alarm thresholds
- Individual and total load limiting for systems with up to two weighing points by connecting multiple units
- Connection of multiple units for load limiting and summing functions
- Lifting operation counters
- When the load is below the set rated value, the 3rd and 4th relays activate so that the system can run at its 3rd and 4th speed stages

MAIN FEATURES

- PC/PLC connection via RS485/RS232
- Connection of up to 2 load cells
- Continuous monitoring of load cell connection integrity
- Theoretical calibration (on the device) and real calibration with reference weights
- Automatic zero setting at power-on
- External display connection via RS485/RS232
- RS485 or RF connection for the summing function (optional)
- Digital filter to reduce weight oscillation
- Tare weight zero setting
- Gross weight zero tracking

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

SCM SMART CRANE MANAGEMENT

CLB

Smart Crane Management & Overload Control Unit

INPUTS / OUTPUTS & COMMUNICATION

- RS485/RS232 serial ports for continuous one-way data transmission via ASCII protocol
- 4 relay outputs
- 2 dedicated load cell inputs
- Integrated RF interface for connecting multiple units (optional)
- 2 independent load cell inputs for individual or combined load limiting
- 2 digital inputs
- 2 selectable analog inputs · 2 selectable analog outputs
- CANBUS · MODBUS

SCM® FEATURES

All of the following functions can be controlled remotely via iOS and Android apps:

- Calibration
- Tare function
- Individual configuration of the four relay outputs
- Gyroscope or anemometer input
- Communication with frequency inverters via Modbus
- Logging of overvoltage, overcurrent, overheating and inverter fault codes
- Real-time recording of overloads and lifting cycles
- Real-time weight recording with product type information
- Export of records to Excel or PDF; printing of reports

TECHNICAL SPECIFICATIONS

Supply voltage & consumption	24–250 VDC/VAC; 6 VA
Load cells • supply	up to 2 (350 Ω) • 10 VDC
Linearity	< 0.01 % full scale
Thermal drift	< 0.002 % full scale/°C
A/D converter	24 bit
Measurement range	±3.9 mV
Conversions per second	3
Decimals • display increments	0÷4 • x1 ×2 ×5 ×10 ×20 ×50
Digital filter	0.25 ÷ 3 Hz
Relay outputs	4 × 30 VDC / 250 VAC, 2 A
Optically isolated digital inputs	2
Serial ports	RS485, RS232
Baud rate	1200, 2400, 9600, 19200, 38400, 57600, 115200 bit/s
Relative humidity (non-condensing)	85 %
Storage temperature	-30 ... +60 °C
Operating temperature	-20 ... +55 °C

COMPLIANCE

CE certification for European Union countries

PL d — Category 2, PL d according to EN ISO 13849-1 (equivalent to SIL 2 in EN 62061)

Pb — Lead-free

OPTIONS ON REQUEST



CED
IP54 aluminium housing, 6-digit external display, RS232/RS485
CED-3X: 3″ · 6 × 76 mm LED · 620 × 150 × 100 mm
CED-4X: 4″ · 6 × 102 mm LED · 770 × 150 × 100 mm



CLP
IP66 pin type load cell · standard 4G0.22 mm, 3.5 m cable



CWL
IP66 wire rope load cell · standard 4G0.22 mm, 3.5 m cable

RF
Integrated radio interface for connecting multiple units · 2.4 GHz (128 channels) · average range 100 m

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

COLM OVERLOAD CONTROL

CLL

COLM Overload Control Unit



Digital load limiter and transmitter for lifting systems with a 6-digit display, four relays and two load cell inputs. Setup, tare and calibration via keypad or the COTO COLM app.

CONNECTIVITY

- Bluetooth
- Wi-Fi
- USB Type-C
- iOS · Android
- PC
- PDF
- Excel
- Print

ORDERING CODE

CLL	–	1	–	1	–	2	–	1	–	M	–	1	–	J
PRODUCT FAMILY		FUNCTION		DATA TRANSFER		RELAYS		LOAD CELL INPUT		COMMUNICATION		WIRELESS		OPTIONAL INPUTS
CLL: control unit		1: overload 2: COLM mobile app		none 1: Type C		2 3 4		1 2		M: Modbus I: 4–20 mA V: 0–10 V		1: none (cable) 2: Bluetooth 3: Wi-Fi		J: angle sensor W: wind sensor

GENERAL DESCRIPTION

- Digital load limiter and transmitter for lifting systems
- Omega/DIN rail mounting on a back panel or in a junction box
- Dimensions: 106 × 106 × 43 mm (including terminal blocks)
- Setup and calibration via keypad or Android / iOS app
- 6-digit display with 5 mm character height
- Alarm signal in the event of a load cell connection fault
- Connection of multiple units for load limiting and summing functions
- LED indicators for relay output status · 5-key keypad

CLL FEATURES

- Load limiting through alarm and pre-alarm thresholds
- Individual and total load limiting for systems with up to two weighing points by connecting multiple units
- Connection of multiple units for load limiting and summing functions
- Lifting operation counters
- When the load is below the set rated value, the 3rd and 4th relays activate so that the system can run at its 3rd and 4th speed stages

MAIN FEATURES

- PC/PLC connection via RS485/RS232
- Connection of up to 2 load cells
- Continuous monitoring of load cell connection integrity
- Theoretical calibration (on the device) and real calibration with reference weights
- Automatic zero setting at power-on
- External display connection via RS485/RS232
- RS485 or RF connection for the summing function (optional)
- Digital filter to reduce weight oscillation
- Tare weight zero setting
- Gross weight zero tracking

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

COLM OVERLOAD CONTROL

CLL

COLM Overload Control Unit

INPUTS / OUTPUTS & COMMUNICATION

- RS485/RS232 serial ports for continuous one-way data transmission via ASCII protocol
- 4 relay outputs
- 2 dedicated load cell inputs
- Integrated RF interface for connecting multiple units (optional)
- 2 independent load cell inputs for individual or combined load limiting
- 2 digital inputs
- 2 selectable analog inputs · 2 selectable analog outputs
- CANBUS · MODBUS

COLM® FEATURES

All of the following functions can be controlled remotely via iOS and Android apps:

- Calibration
- Tare function
- Individual configuration of the four relay outputs
- Gyroscope or anemometer input
- Communication with frequency inverters via Modbus
- Logging of overvoltage, overcurrent, overheating and inverter fault codes
- Real-time recording of overloads and lifting cycles
- Real-time weight recording with product type information
- Export of records to Excel or PDF; printing of reports

TECHNICAL SPECIFICATIONS

Supply voltage & consumption	24–250 VDC/VAC; 6 VA
Load cells • supply	up to 2 (350 Ω) • 10 VDC
Linearity	< 0.01 % full scale
Thermal drift	< 0.002 % full scale/°C
A/D converter	24 bit
Measurement range	±3.9 mV
Conversions per second	3
Decimals • display increments	0÷4 • x1 ×2 ×5 ×10 ×20 ×50
Digital filter	0.25 ÷ 3 Hz
Relay outputs	4 × 30 VDC / 250 VAC, 2 A
Optically isolated digital inputs	2
Serial ports	RS485, RS232
Baud rate	1200, 2400, 9600, 19200, 38400, 57600, 115200 bit/s
Relative humidity (non-condensing)	85 %
Storage temperature	-30 ... +60 °C
Operating temperature	-20 ... +55 °C

COMPLIANCE

CE certification for European Union countries

PL d — Category 2, PL d according to EN ISO 13849-1 (equivalent to SIL 2 in EN 62061)

Pb — Lead-free

OPTIONS ON REQUEST



CED
IP54 aluminium housing, 6-digit external display, RS232/RS485
CED-3X: 3″ · 6 × 76 mm LED · 620 × 150 × 100 mm
CED-4X: 4″ · 6 × 102 mm LED · 770 × 150 × 100 mm



CLP
IP66 pin type load cell · standard 4G0.22 mm, 3.5 m cable



CWL
IP66 wire rope load cell · standard 4G0.22 mm, 3.5 m cable

RF
Integrated radio interface for connecting multiple units · 2.4 GHz (128 channels) · average range 100 m

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

COLM EXTERNAL DISPLAY

CED

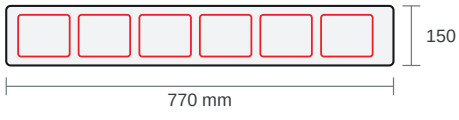
External Display · Control Unit & External Display



Large 6-digit LED display with 3″ or 4″ characters for clear load visibility on site. Available as a pure external display or with integrated control unit; RS232/RS485 communication.

DIMENSIONS

CED-4X · 6 digits · 102 mm



CED-3X · 6 digits · 76 mm



Depth 100 mm · aluminium profile housing, IP54, plexiglass front panel, four Ø4 mm mounting holes.

ORDERING CODE

CED	–	4X	–	L	–	2	–	1	–	M	–	01	–	01
PRODUCT FAMILY		SIZE (INCH / MM)		CONTROL UNIT		RELAYS		LOAD CELL INPUT		COMMUNICATION		WIRELESS		OPTIONAL INPUTS
CED: external display		3″: 620×150×100 4″: 770×150×100		none L		none 2 3 4		none 1 2		M: Modbus I: 4–20 mA V: 0–10 V		01: none (cable) 02: Bluetooth 03: Wi-Fi		J: angle sensor W: wind sensor

GENERAL DESCRIPTION

- Digital load limiter and transmitter for lifting systems
- Setup and calibration via keypad or Android / iOS app
- 6-digit LED display with 3″ or 4″ character height
- Alarm signal in the event of a load cell connection fault
- Connection of multiple units for load limiting and summing functions
- LED indicators for relay output status · 5-key keypad

CED FEATURES

- Load limiting through alarm and pre-alarm thresholds
- Individual and total load limiting for systems with up to two weighing points by connecting multiple units
- Connection of multiple units for load limiting and summing functions
- Lifting operation counters
- When the load is below the set rated value, the 3rd and 4th relays activate so that the system can run at its 3rd and 4th speed stages

MAIN FEATURES

- PC/PLC connection via RS485/RS232
- Connection of up to 2 load cells
- Continuous monitoring of load cell connection integrity
- Theoretical calibration (on the device) and real calibration with reference weights
- Automatic zero setting at power-on
- External display connection via RS485/RS232
- RS485 or RF connection for the summing function (optional)
- Digital filter to reduce weight oscillation
- Tare weight zero setting
- Gross weight zero tracking

MOBILE APP · FOR ANDROID
COTO COLM
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Scan the QR code to download →

COLM EXTERNAL DISPLAY

CED

External Display · Control Unit & External Display

INPUTS / OUTPUTS & COMMUNICATION

- RS485/RS232 serial ports for continuous one-way data transmission via ASCII protocol
- 4 relay outputs
- 2 dedicated load cell inputs
- Integrated RF interface for connecting multiple units (optional)
- 2 independent load cell inputs for individual or combined load limiting
- 2 digital inputs
- 2 selectable analog inputs · 2 selectable analog outputs
- CANBUS · MODBUS

CED FUNCTIONS

With integrated control unit:

- Calibration
- Tare function
- Individual configuration of the four relay outputs
- Gyroscope or anemometer input
- Communication with frequency inverters via Modbus
- Logging of overvoltage, overcurrent, overheating and inverter fault codes
- Real-time recording of overloads and lifting cycles
- Real-time weight recording with product type information
- Export of records to Excel or PDF; printing of reports

TECHNICAL SPECIFICATIONS

Supply voltage & consumption	24–48 VDC/VAC; 6 VA 24–250 VAC; 6 VA
Load cells • supply	up to 2 (350 Ω) • 4 VDC
Linearity	< 0.01 % full scale
Thermal drift	< 0.002 % full scale/°C
A/D converter	24 bit
Measurement range	±3.9 mV
Conversions per second	3
Decimals • display increments	0÷4 • x1 ×2 ×5 ×10 ×20 ×50
Digital filter	0.25 ÷ 3 Hz
Relay outputs	Standard: 2 programmable control relays Optional: 4 programmable control relays 30 VDC / 250 VAC; 2 A
Optically isolated digital inputs	2
Serial ports	RS485, RS232
Baud rate	1200, 2400, 9600, 19200, 38400, 57600, 115200 bit/s
Relative humidity (non-condensing)	85 %
Storage temperature	-30 ... +60 °C
Operating temperature	-20 ... +55 °C

COMPLIANCE

CE certification for European Union countries

PL d — Category 2, PL d according to EN ISO 13849-1 (equivalent to SIL 2 in EN 62061)

Pb — Lead-free

OPTIONS ON REQUEST



CLL
COLM and overload limiter control unit



CLB
SCM and overload limiter control unit



CLP
Pin type load cell



CWL
Wire rope load cell

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
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LOAD CELLS

CWL

Wire Rope Load Cell



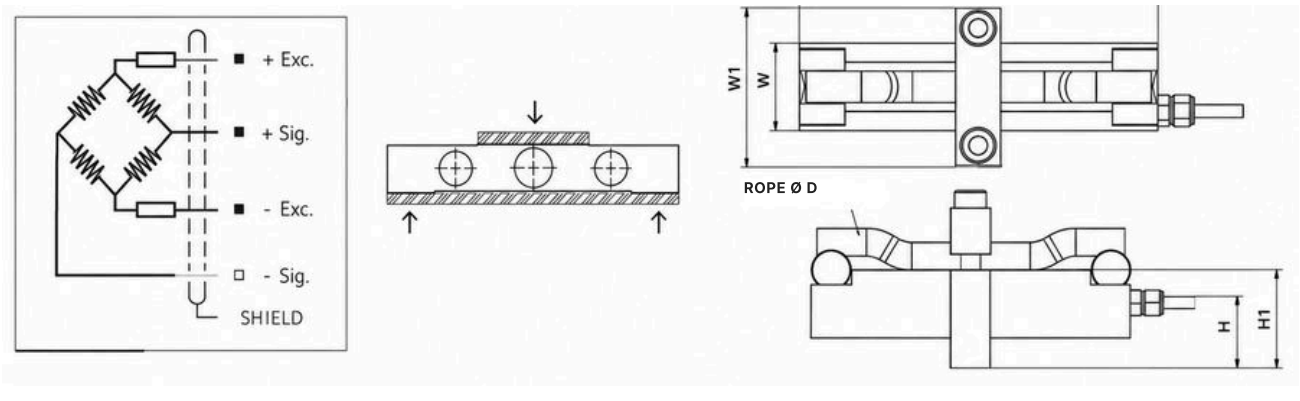
The CWL wire rope load cell provides accurate and reliable measurements thanks to its wire rope design and four-point sensing. It is designed for cranes, mobile weighing applications and industrial load measurement systems.

CWL is available in different sizes and capacities. Alongside the standard mV/V output it offers 4–20 mA and 0–10 V analog outputs and RS485 digital communication for easy integration.

ORDERING CODE

CL	–	W	–	10	–	SS	–	2	–	1	–	1	–	1
PRODUCT FAMILY		**MOUNTING TYPE**		**CAPACITY (T)**		**BODY MATERIAL**		**RESISTANCE**		**ROPE DIAMETER**		**OUTPUT**		**VERSION**
CWL · wire rope type		P: pin type W: wire rope		1 / 2 / 3 / 5 10 / 15 / 20 / 50		S: alloy steel SS: stainless steel		2: 350 Ω 4: 700 Ω		1: 8–18 mm 2: 12–22 mm 3: 22–36 mm		mV I: 4–20 mA V: 0–10 V M: Modbus RTU		1: standard 2: special

TECHNICAL DIMENSIONS



Capacity	A	B	C	D	E	H	Rope Ø	Cable
1 t	150	46	20	32	76.5	70–76	Ø 8 / 14	3.5 m
2.5 t	170	46	25	32	76.5	75–85	Ø 10 / 20	3.5 m
5 t	200	53	34	38.1	84	96–108	Ø 12 / 28	3.5 m
10 t	220	53	39	38.1	100	96–113	Ø 18 / 34	3.5 m
20 t	280	53	40	38.1	100	96–120	Ø 20 / 36	3.5 m

All dimensions in mm.

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

LOAD CELLS

CWL

Wire Rope Load Cell

MAIN FUNCTIONS

Optional connections

- PC/PLC connection via RS485/RS232
- Remote display connection via RS485/RS232
- 4–20 mA and 0–10 V analog output options
- Four strain gauges for maximum measurement accuracy

COMPLIANCE

- CE certification for European Union countries
- IP66 protection against dust and powerful water jets
- Lead-free

TECHNICAL SPECIFICATIONS

Capacity	1 to 200 t
Accuracy class	D1
Max. recommended excitation	15 VDC
Recommended excitation	10 VDC
Total error	±0.5 % FS
Rated output (full scale)	1.2 ± 0.2 mV/V
Zero balance	±1 % FS
Input resistance	380 ± 20 Ω / 720 ± 20 Ω
Output resistance	350 ± 5 Ω / 702 ± 5 Ω
Insulation resistance	≥ 5000 MΩ (100 VDC)
Compensated temperature range	-10 ... +40 °C (optional)
Operating temperature	-30 ... +70 °C
Protection	IP66
Material	Alloy steel / stainless steel
Safe / ultimate overload	150 % FS / 300 % FS

OPTIONS ON REQUEST



CED
Aluminium profile housing, IP54, plexiglass front panel
CED-4X: 770 × 150 × 100 mm · CED-3X: 620 × 150 × 100 mm



CLL
COLM and overload limiter control unit



CLB
SCM and overload control unit

OPTIONS

- BLACKBOX functions
- Integrated RF interface for connecting multiple units: 2.4 GHz (128 channels)
- Average range: 100 m (open area)
- More information on the related product pages

The company reserves the right to change technical data, drawings and images without prior notice.

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
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LOAD CELLS

CLP

Pin Type Load Cell



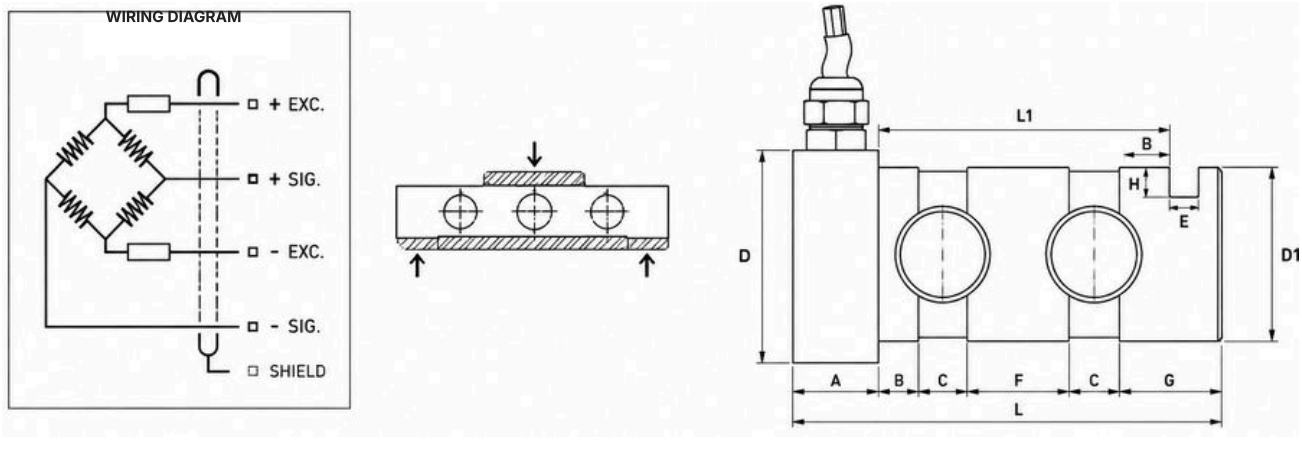
The CLP pin type load cell provides accurate and reliable measurements thanks to its cylindrical pin design and four-point sensing. It is designed for cranes, mobile weighing applications and industrial load measurement systems.

CLP is available in different sizes and capacities. Alongside the standard mV/V output it offers 4–20 mA and 0–10 V analog outputs and RS485 digital communication for easy integration.

ORDERING CODE

CL	P	10	SS	2	1	1
PRODUCT FAMILY	MOUNTING TYPE	CAPACITY (T)	BODY MATERIAL	RESISTANCE	OUTPUT	VERSION
CLP · pin type	P: pin type W: wire rope	1 / 2 / 3 / 5 10 / 15 / 20 / 50	S: alloy steel SS: stainless steel	2: 350 Ω 4: 700 Ω	mV I: 4–20 mA V: 0–10 V M: Modbus RTU	1: standard 2: special

TECHNICAL DIMENSIONS



Capacity	D	D1	L	L1	A	B	C	E	F	G	H	Cable
1–2 t	39	30	81	52	16	7	10	6	18	20	6	3.5 m
3 t	44	35	82	55	16	8	10	6	19	19	6	3.5 m
5 t	49	40	96	64	20	9.5	12	7	21	21.5	8	3.5 m
10 t	59	50	114	80	20	10	16	7	28	24	8	3.5 m

All dimensions in mm · cable length 3.5 m · tolerance ±1 mm.

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

LOAD CELLS

CLP

Pin Type Load Cell

MAIN FUNCTIONS

Optional connections

- PC/PLC connection via RS485/RS232
- Remote display connection via RS485/RS232
- 4–20 mA and 0–10 V analog output options
- Four strain gauges for maximum measurement accuracy

COMPLIANCE

- CE certification for European Union countries
- IP66 protection against dust and powerful water jets
- Lead-free

TECHNICAL SPECIFICATIONS

Capacity	1 to 200 t
Accuracy class	D1
Max. recommended excitation	15 VDC
Recommended excitation	10 VDC
Total error	±0.5 % FS
Rated output (full scale)	1.2 ± 0.2 mV/V
Zero balance	±1 % FS
Input resistance	380 ± 20 Ω / 720 ± 20 Ω
Output resistance	350 ± 5 Ω / 702 ± 5 Ω
Insulation resistance	≥ 5000 MΩ (100 VDC)
Compensated temperature range	-10 ... +40 °C (optional)
Operating temperature	-30 ... +70 °C
Protection	IP66
Material	Alloy steel / stainless steel
Safe / ultimate overload	150 % FS / 300 % FS

OPTIONS ON REQUEST



CED
Aluminium profile housing, IP54, plexiglass front panel
CED-4X: 770 × 150 × 100 mm · CED-3X: 620 × 150 × 100 mm



CLL
COLM and overload limiter control unit



CLB
SCM and overload control unit

OPTIONS

- BLACKBOX functions
- Integrated RF interface for connecting multiple units: 2.4 GHz (128 channels)
- Average range: 100 m (open area)
- More information on the related product pages

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MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →



SECTION 03 / 09

Angle Limit Sensors

Rope angle monitoring on the X and Y axes prevents side pull and protects the rope, rope guide and gearbox.

CAS

ROPE ANGLE CONTROL

CAS

Angle Limit Sensor & Controller



Digital angle limiter and controller for lifting systems. The CAS module is a high-performance inclination sensor and controller that can be connected to CLL, CLB or CED units to prevent lifting at forbidden angles on electric cranes and to give an audible warning.

OPERATING PRINCIPLE

The system calculates the angular difference between the X and Y axes and defines a cone-shaped area in which the working limits and warnings of the lifting system are set. It can be configured to protect X or Y, X and Y, or the resulting angle (360°).

MOUNTING

Supplied with different mounting brackets to suit the various installation requirements of electric cranes.

BENEFITS

- Prevents accidents caused by load displacement when lifting off the ground
- Reduces wear and breakage risk of the rope guide and the risk of rope failure
- Extends the service life of rope, rope guide and gearbox

Bluetooth · iOS · Android · 2 relays · OLED 0.96″

ORDERING CODE

CAS	– 1	– 2	– M	– 1	– L
PRODUCT FAMILY	FUNCTION	RELAYS	COMMUNICATION	WIRELESS	CABLE LENGTH
CAS: angle limit	1: angle limit sensor 2: angle limit controller	1: no relay 2: 2 × relay	M: Modbus	0: none (cable)	2: 2 m 3: 3 m 4: 4 m 5: 5 m

COMPLIANCE

CE certification for European Union countries

PL d — Category 2, PL d according to EN ISO 13849-1 (equivalent to SIL 2 in EN 62061)

Pb — Lead-free

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →

ROPE ANGLE CONTROL

CAS

Angle Limit Sensor & Controller

ROPE ANGLE CONTROL

For safe, efficient and long-lasting crane operation, the rope must hang vertically.



SCM® FEATURES

When used with the CLB control unit, all of the following functions can be controlled remotely via iOS and Android apps:

- Angle limiting through alarm and pre-alarm thresholds
- As the angle approaches the set value the 1st warning relay activates; when it reaches the set value the final relay prevents the crane from lifting with side pull
- Individual configuration of 2 relay outputs
- Communication with frequency inverters via Modbus
- Real-time recording of angle faults
- Continuous one-way data transmission via MODBUS protocol
- Setting via keypad or Android / iOS app
- Alarm signal if the angle sensor connection is lost
- 3-key keypad

TECHNICAL SPECIFICATIONS

Supply & consumption	1.5 W (24 VDC) / 2 W (220 VAC)
Control axes	X / Y, or X and Y together in a 360° cone
Linearity	< 0.01
Thermal drift	< 0.002 % / °C
Response time	< 50 ms
Measurement range	Adjustable – default 2°
Remote connection	Bluetooth
Display	OLED, 0.96″
Communication	Modbus RTU
Relay outputs	2 × 30 VDC / 250 VAC, 2 A
Relative humidity (non-condensing)	85 %
Storage temperature	-30 … +60 °C
Operating temperature	-20 … +55 °C
Protection	IP65

The company reserves the right to change technical data, drawings and images without prior notice.

MOBILE APP · FOR ANDROID
COTO COLM
Monitor crane loads, connect to your COTO device via Bluetooth and manage system settings.
GET IT ON Google Play
Scan the QR code to download →



SECTION 04 / 09

Anti-Collision Sensor

Laser distance sensing with two independently adjustable relays for safe distances between cranes and obstacles.

CAC-3502RT

ANTI-COLLISION

CAC-3502RT

Anti-Collision Laser Distance Sensor



Laser distance sensing. Independent relay control.

The CAC-3502RT is a diffuse-reflective laser distance sensor for anti-collision applications with a detection distance of 3.5 m. The distance thresholds of its two independent relays can be set separately, and a visible red laser spot on the target simplifies alignment.

3.5 m	2 relays	0.96″
Detection distance	Independent distance settings	OLED display

ORDERING CODE

CAC – 350 – 2 – R – T

PRODUCT FAMILY	DETECTION DISTANCE	RELAYS	OUTPUT TYPE	CONNECTION
Anti-collision sensor	200: 200 cm 350: 350 cm	1 2	R: relay P: PNP N: NPN	T: terminal C: cable

KEY FEATURES

- Two independent relays with adjustable thresholds
- Diffuse-reflective laser sensing
- Visible red laser spot on the target
- 24–250 V AC/DC power supply
- 0.96″ OLED display
- IP65 protection and terminal connection

STABLE DETECTION

Independent of ambient light

Maintains stable operation during transitions between bright and dark environments.

Independent of surface colour

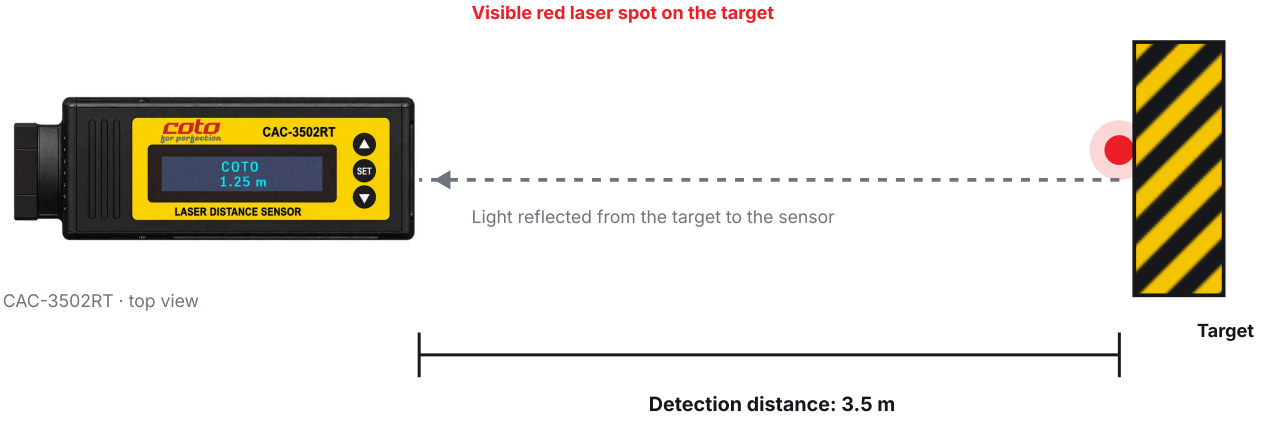
Provides stable and consistent distance detection regardless of the colour of the target surface.

ANTI-COLLISION

CAC-3502RT

Anti-Collision Laser Distance Sensor

OPERATING PRINCIPLE



CAC-3502RT · top view

R1 Independently adjustable distance threshold

R2 Independently adjustable distance threshold

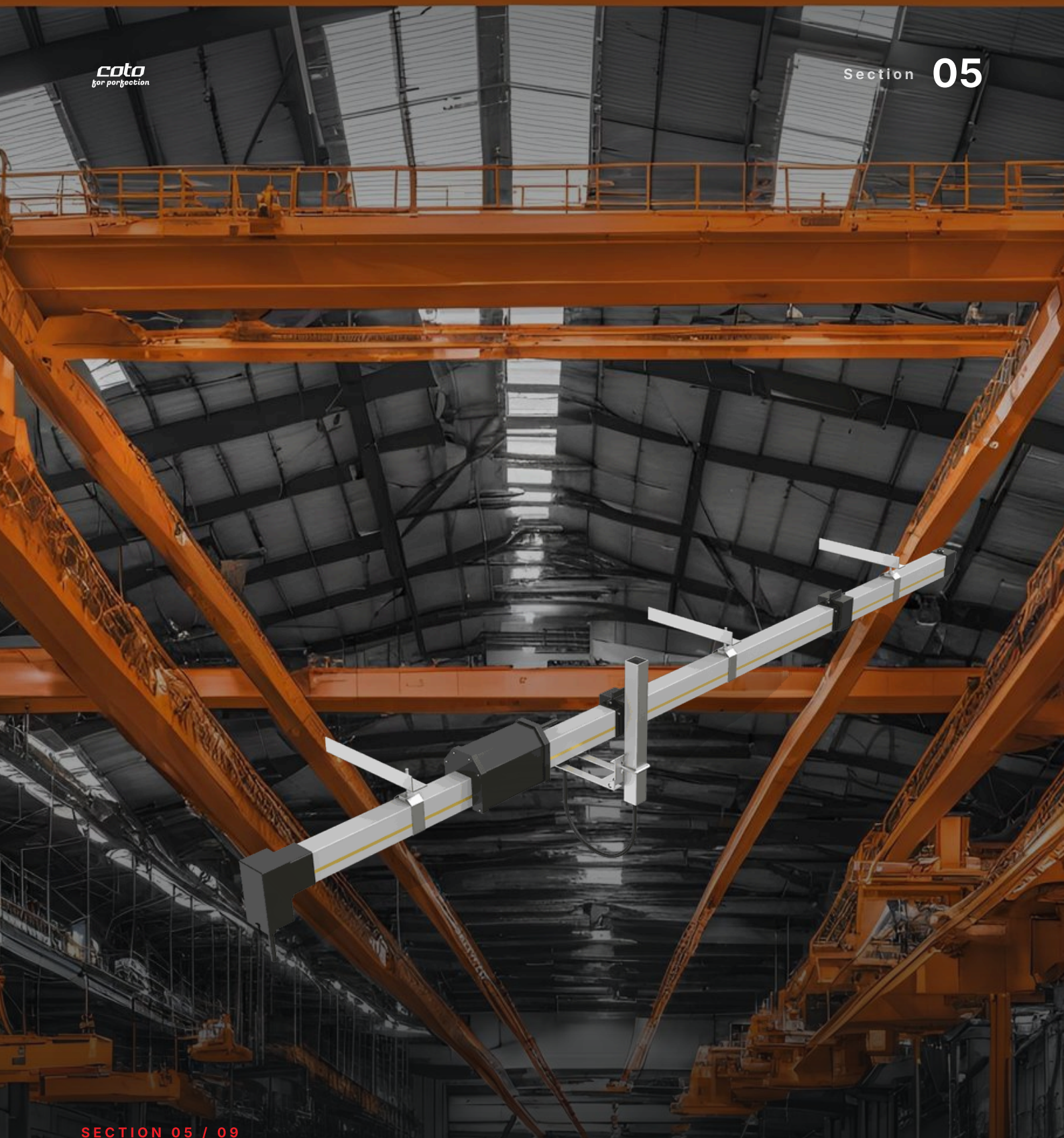
Diagram illustrates the sensing principle; not to scale.

The sensor detects the laser light reflected from the target with a receiver in the same housing (diffuse-reflective sensing). Both relay thresholds are set to suit the application; the relay outputs perform the functions assigned in the machine control circuit.

TECHNICAL SPECIFICATIONS

Product code	CAC-3502RT
Product type	Anti-collision / distance sensor
Sensing principle	Diffuse-reflective laser
Detection distance	3.5 m
Distance setting	Adjustable
Relay outputs	2 independent, individually adjustable relays
Target indicator	Visible red spot on the target
Supply voltage	24–250 V AC/DC
Display	0.96″ OLED
Dimensions	60 × 20 mm
Protection	IP65
Connection	Terminal

The company reserves the right to change technical data, drawings and images without prior notice.



SECTION 05 / 09

Crane Busbar Systems

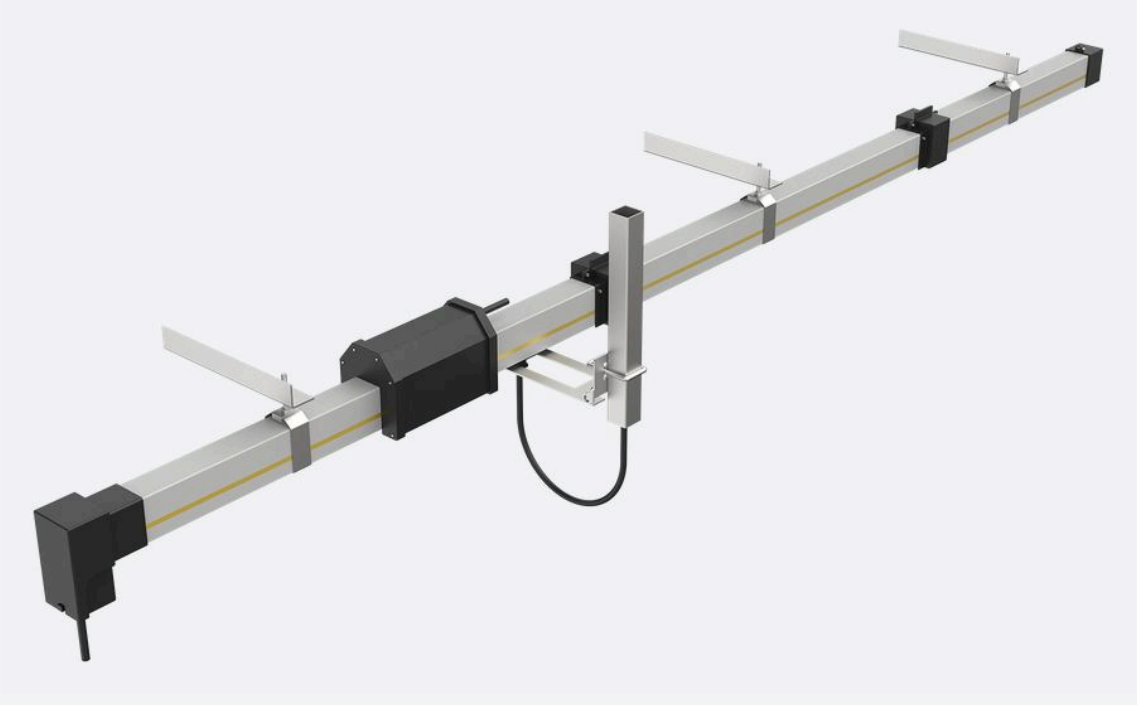
Enclosed, open and insulated conductor rail systems for reliable power transmission to cranes.

CKB 56 | CAB | CMBH H32

ENCLOSED BUSBAR SYSTEM

CKB 56

Enclosed conductor rail for cranes



COTO's CKB 56 is an excellent enclosed busbar system designed for cranes. This powerful model carries high currents from 35 to 240 A without any problems. Supplied in a standard length of 4 m, the CKB 56 is an ideal solution for power transmission.

Depending on the requirements of your project we also offer other lengths up to 6 m. Combining durability and flexibility, the CKB 56 meets the needs of your crane projects and helps you manage power transmission safely and efficiently.

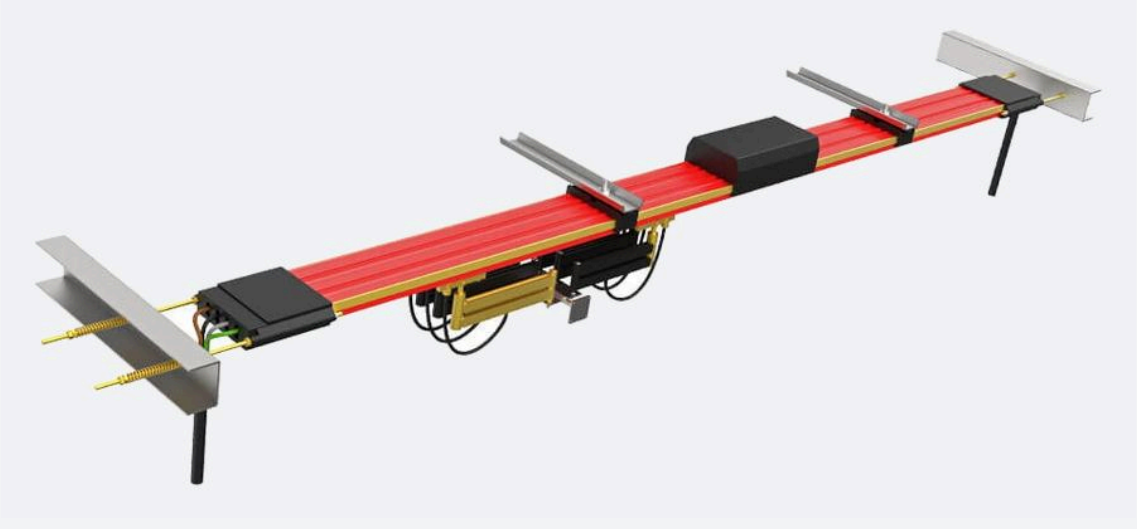
TECHNICAL SPECIFICATIONS

Current range	35 A – 240 A
Standard length	4 m
Special lengths	up to 6 m

OPEN BUSBAR SYSTEM

CAB

Open conductor rail for cranes



COTO's CAB is a powerful open busbar system built for cranes. This model safely carries high currents and performs power transmission smoothly. Supplied in a standard length of 4 m, it offers excellent performance; other lengths up to 6 m are available to suit your project.

Combining durability and flexibility, the CAB is an ideal solution for your crane projects. Its strong current-carrying capacity makes power transmission reliable and efficient.

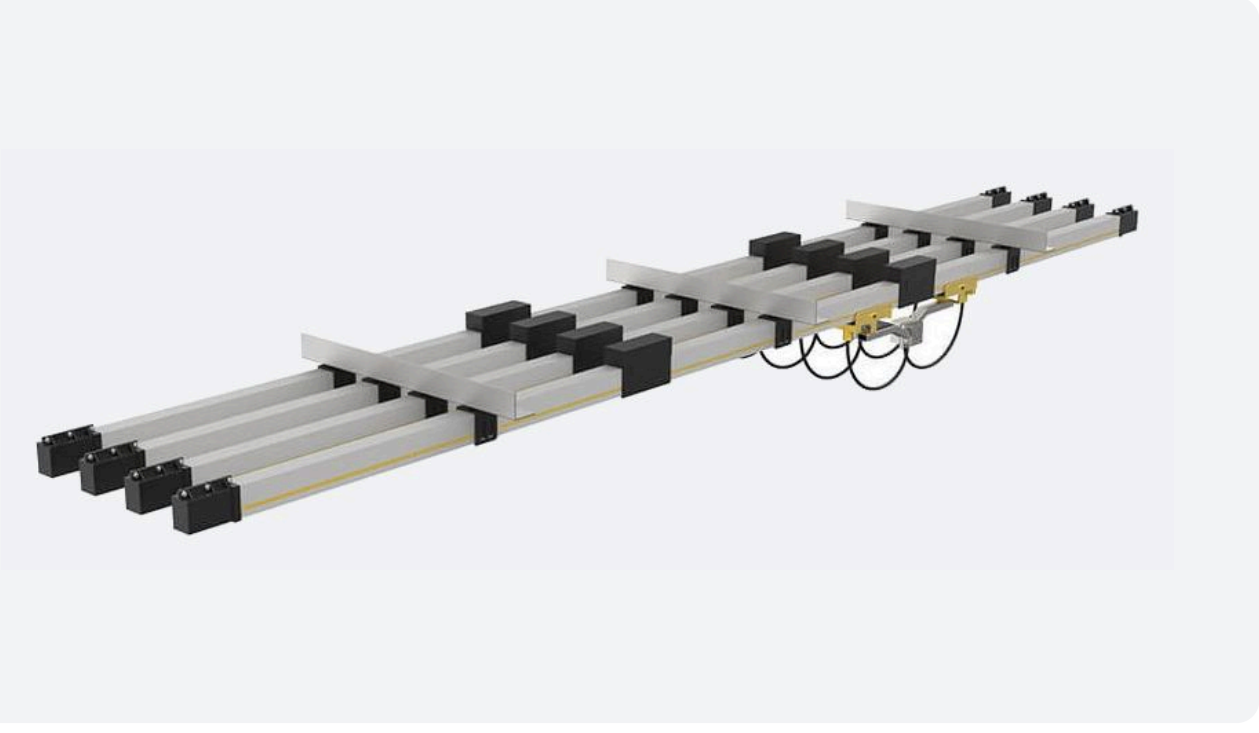
TECHNICAL SPECIFICATIONS

Current range	35 A – 140 A
Standard length	4 m
Special lengths	up to 6 m

INSULATED BUSBAR SYSTEM

CMBH H32

Insulated single-pole conductor rail



The CMBH H24–H32 offers a powerful solution for insulated single-pole busbar systems. It safely handles high currents from 320 to 1600 A and is supplied in a standard length of 4 m; special lengths up to 6 m are available on request.

Combining durability and flexibility, the CMBH series offers the best solution for your crane projects. Its high current-carrying capacity allows you to manage power transmission reliably and efficiently.

TECHNICAL SPECIFICATIONS

Current range	320 A – 1600 A
Series	H24 – H32
Standard length	4 m
Special lengths	up to 6 m



SECTION 06 / 09

Crane Inverters

Compact, modular frequency inverters for smooth and efficient crane motion control.

i550

CRANE INVERTERS

i550

Frequency inverter series



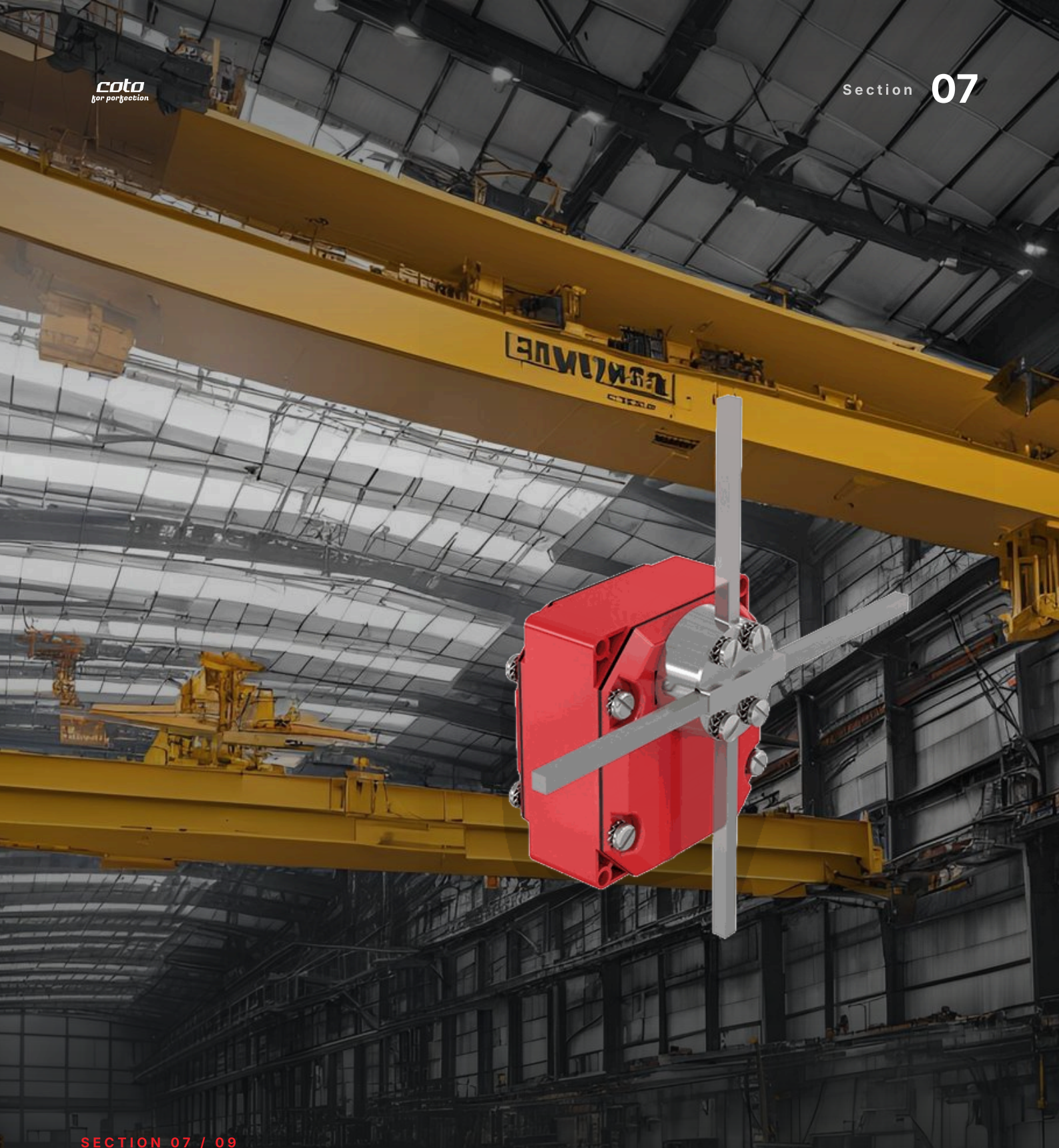
Our new i550 inverter series covers a power range of 0.25 to 132 kW. Its distinguishing features: slim modular design, functionality and exceptional ease of use in hoisting applications.

0.25 ... 132 kW **CE · UL · CSA · EAC**

Modbus · PROFINET · EtherCAT

TECHNICAL SPECIFICATIONS

Mains	1 AC 120 V	0.37 ... 1.1 kW
	1 AC 230 V	0.37 ... 2.2 kW
	1/3 AC 230 V	0.37 ... 2.2 kW
	3 AC 230 V	3 ... 11 kW
	3 AC 400 V	0.37 ... 132 kW
	3 AC 600 V	0.37 ... 132 kW
Overcurrent	Mode S1: 150 % · mode S6: 200 %	
Interfaces	Digital inputs/outputs (5/1), analog inputs/outputs (2/1), relay	
	External 24 V supply, PTC/thermal contact input, HTL incremental encoder (100 kHz), USB on board	
	CANopen, EtherCAT, EtherNet/IP, Modbus RTU, Modbus TCP, PROFINET, IO-Link; integrated brake chopper; DC bus connection	
Approvals	CE, UL, CSA, EAC, RoHS2, IE2 according to EN 50598-2	
Functions	V/f characteristic control linear/quadratic (VFC plus), sensorless vector control (SLVC), energy-saving function (VFC-Eco), servo control with feedback (SC-ASM), sensorless control of synchronous motors	
	DC braking, brake management for low-wear brake control	
	S-ramps for smooth acceleration and deceleration, flying restart, PID controller	



SECTION 07 / 09

Limit Switches

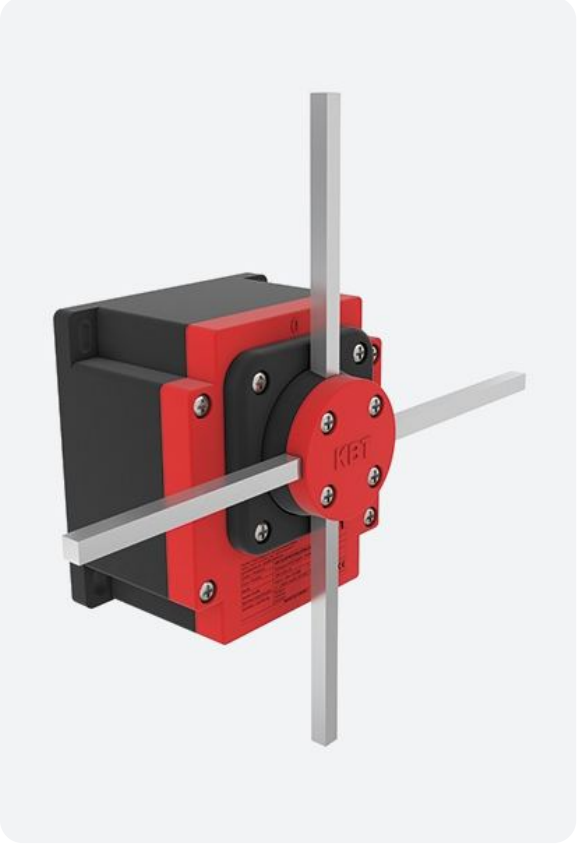
Cross, position and rotary limit switches built for heavy-duty crane and hoisting applications.

CRS | CMS-2CO | CTS

CROSS LIMIT SWITCH

CRS

Position limit switch – cross fork switch (metal housing)



CRS fork switches are designed specifically for machine and crane applications and ensure maximum safety with high performance. They are mounted on the crane travel path and used for control tasks such as reporting the machine position, stopping the system or giving a warning.

Thanks to their heavy-duty design they are suitable for many industrial applications and remain reliable for many years. The anti-static powder-coated die-cast aluminium housing resists corrosion and high temperatures. CRS series products are maintenance-free.

All products conform to CE (European Union) and EAC (Eurasian Economic Union) standards. The switches used are UL approved.

TECHNICAL SPECIFICATIONS

Housing	Die-cast aluminium
Rotary switch rating	690 V / 20 A
Cable entry	PG13.5
Temperature range	-30 ... +80 °C
Movement angle	up to 360° in 90° steps
Protection	IP65
Housing colour	Red (RAL 3020) and black (RAL 9005)
Mounting	Body mounting
Mechanical endurance	100,000 operations
Impact resistance	IK08 (EN 62262)
Warranty	24 months

CROSS LIMIT SWITCH

CMS-2CO

Position limit switch for crane applications



CMS-2CO position limit switches are designed specifically for crane applications and ensure safety. They can be used for slow-down and stop functions and do not allow the crane to move outside its defined travel range.

Thanks to their durable design they are suitable for many industrial applications and remain reliable for many years. The anti-static powder-coated die-cast aluminium housing resists corrosion; the lever mechanism and all internal parts are made of cast metal. CMS-2CO products are maintenance-free.

The contact arrangement is 2 × 1NO+1NC, switching at 90° intervals. All products conform to CE and EAC standards; the micro switches used are VDE approved.

TECHNICAL SPECIFICATIONS

Housing	Die-cast aluminium
Micro switch rating	240 V 3 A
Output signal	(2) SPDT
Cable entry	PG13.5
Temperature range	-40 ... +80 °C
Contact angles	360° in 90° steps
Protection	IP65
Housing colour	Red (RAL 3020) + black (RAL 9005)
Weight	1.1 kg
Mounting	Body mounting
Mechanical endurance	10,000,000 operations
Impact resistance	IK09 (EN 62262)
Warranty	24 months

ROTARY LIMIT SWITCH

CTS

CTS series rotary (drum) limit switch



CTS series rotary limit switches control the movements of various industrial machines, especially crane and hoisting equipment. The switch shaft is connected to the equipment it controls; after a preselected number of turns the cams on the shaft actuate the internal switches.

Cams selectable in three angles ensure precise switching. Ratios from 1:6 to 1:250 are available and the switch can be supplied with 2, 3 or 4 contacts on request. Thanks to its manufacturing quality it is designed for many years of use.

CAM TYPES



A cam
20°

B cam
45°

C cam
90°

TECHNICAL SPECIFICATIONS

Housing	Thermoplastic
Micro switch rating	250 VAC 3 A
Output signal	max. 4 NC + 4 NO
Cable entry	M16 × 1.5
Operating temperature	-25 ... +70 °C
Contact type	Snap-action
Protection	IP67
Housing colour	Black (RAL 9005)
Weight	300 g
Mounting	Single-axis use
Drive	Worm drive
Shaft diameter	8 mm or 12 mm (optional)
Mechanical life	2 × 1,000,000 operations



SECTION 08 / 09

Electrical Crane Equipment

Audible and visual warning devices, load limiters and accessories that complete the crane electrical system.

CR-IS

CWL

ELECTRICAL CRANE EQUIPMENT

CR-IS

Light horn – audible and visual warning device



The COTO CR-IS is an audible and visual warning device. Its red beacon offers 4 signal types: steady, strobe, flashing and rotating.

The sound level of the buzzer is between 90 and 110 dB. Made of industrial ABS plastic, the CR-IS light horn has IP65 protection.

TECHNICAL SPECIFICATIONS

Supply	12–24 V DC · 24 V, 110 V, 220 V AC
Signal type	Steady, flashing, strobe, rotating
Buzzer output	90 dB, 110 dB
Dimensions	69 × 73 × 222 mm
Weight	300 g
Connection	Cable
Protection	IP54 / IP65

ELECTRICAL CRANE EQUIPMENT

CWL

CWL overload limiter with display

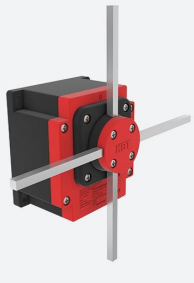


Overload limiter with digital display for wire rope hoists, with audible and visual alarm output.

KEY FEATURES

- Supports wire ropes from Ø 5 to 26 mm
- Audible and visual alarm output
- 150 % static strength
- Supports up to 32 t
- 380 / 220 VAC supply
- Easy installation and commissioning

ACCESSORIES



CRS FORK SWITCH



BRAKING RESISTOR



COLLISION SENSOR



SECTION 09 / 09

Crane Safety Lights

Hololight projectors and LED safety lights that make crane and forklift working areas visible and safe.

CHL CR-SL

HOLOLIGHT PROJECTOR

CHL

CHL safety projectors





CUSTOM SYMBOLS

To make the entire crane working area safe, the warning symbols required for occupational safety can be designed (walkway, do not stand under the load, crane in operation, wear a helmet, etc.).

All necessary symbols can be designed for safe forklift and personnel areas (speed limit, forklift route, walkway, forklift approaching, etc.).

A safe walkway symbol can be projected in work areas to prevent possible accidents and create a safe and efficient working environment – warnings can also be activated by sensors.

For crane and forklift areas: walkway, do not stand under the load, crane in operation, forklift route, go slow, speed limit and more.

TECHNICAL SPECIFICATIONS

Model	Power	Distance	Luminous flux	Supply
CHL-100	100 W	5 – 20 m	15,000 lm	220 V AC
CHL-200	200 W	10 – 40 m	15,000 lm	220 V AC
CHL-320	320 W	30 – 100 m	15,000 lm	220 V AC

LED SAFETY LIGHTS

CR-SL

CR-SL crane safety lights





Red LED crane safety lights with Cree LED chips, available in 60 W and 120 W versions for a 9–48 V DC supply.

TECHNICAL SPECIFICATIONS

Feature	CR-SL60	CR-SL120
Supply voltage	9 ~ 48 V DC	9 ~ 48 V DC
Power (max.)	60 W	120 W
LED chip	Cree	
Protection	IP67	
Colour	Red	
Weight	2 kg	
Beam	Spot	
Dimensions	180 × 85 mm	
Service life	50,000 hours	
Operating temperature	-40 ... +80 °C	

PRODUCT CATALOGUE

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