ELCO Provides You
with a Full Range of Automation Solutions

ELCO 2025.06 V1.0

2025.03 001

ELCO
INDUSTRIAL AUTOMATION

CONTENTS

Sensor

SENSOR

Inductive Sensor

- Cylindrical, square and other shapes appearance
- G series design 2 times detection distance, temperature resistance up to -30 ... +85 °C
- ZG series design Wide voltage and Stainless steel housing
- Multiple connection methods and IP67 / IP68 protection class

Capacitive Sensor

- Cylindrical and special square appearance products
- Possess potentiometer sensitivity adjustment device
- Possess different protection circuits and prodect the product proper functioning
- Apply to liquid and object level monitoring and other non-metal or metal detection
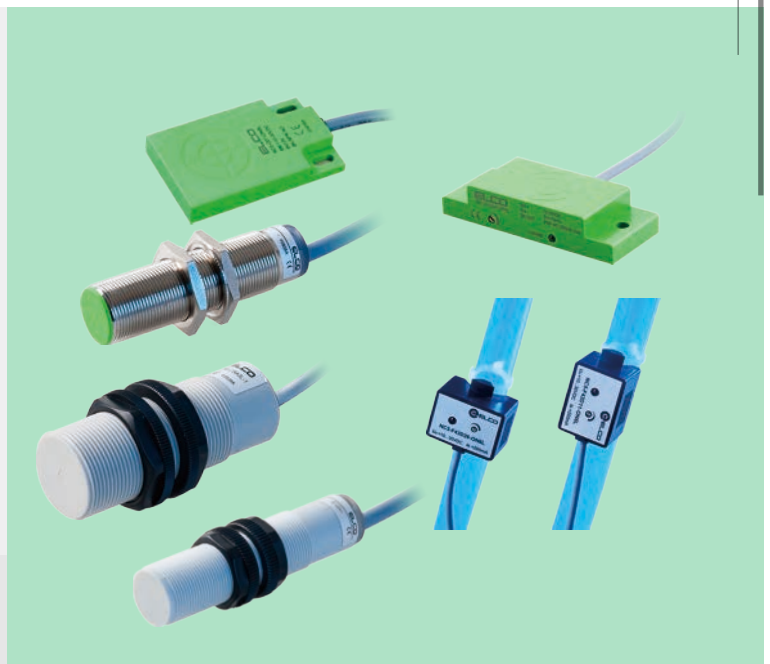
Special Inductive Sensor

- Cylindrical, square and other shapes appearance
- Product series include all-metal, long-sensing, wide temperature, magnetic field immune, high pressure resistant
- PTFE-coated,analog output and NAMUR
- Multiple connection methods and IP67 / IP68 protection class

Ultrasonic Sensor

- Cylindrical shape,compactstructure
- Push button debugging
- Analog ,digital output, full connector connection
- Applied to liquid and object level monitoring, and inspection position and status od object in long-distance

Sensor

SENSOR

Universal Photoelectric Sensor

- Red light, laser, infrared light source
- Different detection modes, through beam, reflector and diffuse
- Features:

  BGS, stable bright and dark detection
- Product range:

  OP12, OP18, OG18, OSQ18, OS4, OS22,

  OS10, OS10S, OS50, etc.

Distance Measurement Sensor

- Red light, laser,infrared light source
- Analogue, switching double, RS485, IO-Link, UART
- Teach-in button, potentiometer adjustment LED display
- Product range:

  OS10S, OS10U, OSM40, OSM41, OSM42, OSM45,

  OSM47, OSM58, OSM61, OSM70, etc.

Long distance laser measurement

- Metal shell, mirror reflection ranging up to 100 meters

- Rich fieldbus interface

- LED display and button setting

- Suitable for stackers, automatic parking systems, lifting
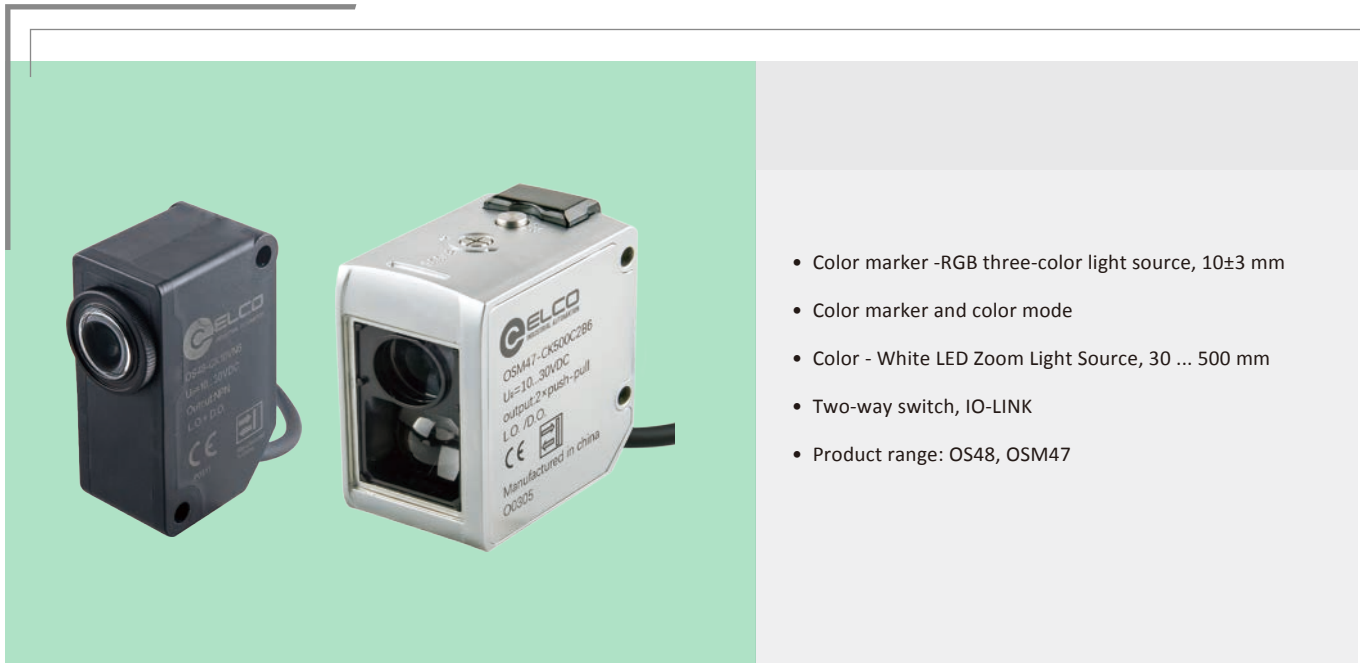
equipment, etc.

Optical Data Communication

- Metal housing, optical data transmission

- Parallel optical axis operation, no reflection surface interference

- Fast transparent transmission without

communication protocol, up to 100 M bit/s

- Common interface types EtherNet, TCP/IP, PROFINET

- Used in automobile manufacturing, three-dimensional warehouse,

stacker and other industries

Sensor

SENSOR

Color and Color marker sensor

- Color marker -RGB three-color light source, 10±3 mm

- Color marker and color mode

- Color - White LED Zoom Light Source, 30 ... 500 mm

- Two-way switch, IO-LINK

- Product range: OS48, OSM47

Through beam and diffuse correction sensor

- Through beam correction needs to be used with a controller

- Output: switch + analog or RS485

- The controller communication unit is cascadedto realize EC remote control

- Diffuse correction support IO-LINK

- Product range: OSMT60, OSM60A

Optical fiber sensor

- Individual and cascade fiber amplifiers

- Fiber amplifiers can be cascaded with 8 or 16 expansion units

- Various optical fiber cable types are available

- Equipped with multifunctional output or input and communication gateway

- Product range:OC10 series

Contact displacement sensor

- Contact displacementneeds to be used with a controller

- Output: switch + analog or RS485

- The number of expansion controllers ≤8

- The controller communication unit is cascadedto realize EC remote control

- Product range: GM Series

3D Smart Laser Profile Sensors

SENSOR

LVM21 series

- Data points: 1456
- Clearance distance: 52 ... 350 mm
- Measurement range: 26 ... 842 mm
- Scan rate: 270 … 5000 Hz
- Inputs: Differential encoder, laser safety enable, trigger
- Outputs: 2 x digital output, RS - 485 serial, 1 x analog output
- Ambient temperature: 0 … +50 °C

LVM22 series

- Data points: 2048
- Clearance distance: 65 ... 176 mm
- Measurement range: 30 ... 491.3 mm
- Scan rate: 240 … 5000 Hz
- Inputs: Differential encoder, laser safety enable, trigger
- Outputs: 2 x digital output, RS - 485 serial, 1 x analog output
- Ambient temperature: 0 … +50 °C

LVM23 series

- Data points: 4200
- Clearance distance: 110 ... 357.6 mm
- Measurement range: 132.5 ... 1576.2 mm
- Scan rate: 316 … 12000 Hz
- Inputs: Differential encoder, laser safety enable, trigger
- Outputs: 2 x digital output, RS - 485 serial, 1 x analog output
- Ambient temperature: 0 … +50 °C

LVM24 series

- Data points: 3200

- Clearance distance: 25.2 ... 651.1 mm

- Measurement range: 13.8 ... 1512.1 mm

- Scan rate: 1400 ... 40000 Hz

- Inputs: Differential encoder, laser safety enable, trigger

- Outputs: 2 x digital output, RS - 485 serial, 1 x analog output

- Ambient temperature: 0 ... +50 °C

LVM25 series

- Data points: 4096

- Clearance distance: 16 ... 206.5 mm

- Measurement range: 4.8 ... 457.1 mm

- Scan rate: 1800 ... 37900 Hz

- Inputs: Differential encoder, laser safety enable, trigger

- Outputs: 2 x digital output, RS - 485 serial, 1 x analog output

- Ambient temperature: 0 ... +50 °C

Encoder

ENCODER

Photoelectric Incremental Encoder

- AL-alloy housing is robust and durable

- Advanced dual shaft structure, excellent mechanical load performance

- Over-current and short-circuit protection to ensure product safety

- Multi-resolution optional, excellent transmission distance

- Heavydic design to meet the harsh environment of heavy industry

- Large hollow shaft product is easy to install and save installation space

Photoelectric Absolute Encoder

- Parallel interface, serial interface, analog interface are optional

- Industrial Ethernet PROFINET/IO, EtherNet/IP, EtherCAT interface use with different host computers

- Fieldbus PROFIBUS-DP, CANopen, DeviceNet meet different needs

- Shaft and hollow shaft are available for option, with various European standard flanges

- Single-turn resolution up to 19bits, multi-turn resolution up to 31 bits

- Provide mechanical and electronic multiturn measurement technology, excellent mechanical performance, meet the stringent requirements of various industrial sites

Special Application Encoder

- Explosion-proof products: shaft and hollow shaft are available for option, a variety of electrical output interfaces are optional, AL-alloy and stainless steel are optional

- High and low temperature products: high temperature products can reach a maximum working temperature of 110 °C, and low temperature products can reach a minimum working temperature of -40 °C

- Corrosion-resistant products: stainless steel housing and components can be used in strong corrosive environments, such as metallurgical pickling line, marine petrochemical and other harsh sites

Encoder

ENCODER

Magnetic Encoder

- Magnetic technology, safe and reliable

- Small size, save installation space

- Complete magnetic technology solution, provide incremental and absolute products

- Excellent magnetic chip technology, support SSI, 4 ... 20 mA and CANOPEN three interface signal outputs

- Reverse protection and short circuit protection

- Stainless steel and customized selection of low temperature resistant products

Accessory

- Drag wire product is used together with the encoder to provide a variety of electrical output interface options, high repeat positioning accuracy is 0.05 mm

- Overspeed switch to ensure safe production on-site in heavy industry

- Rich electrical connection accessories and mechanical installation accessories

PLC

Logic X series PLC

Logic X0   Logic X1   Logic X3
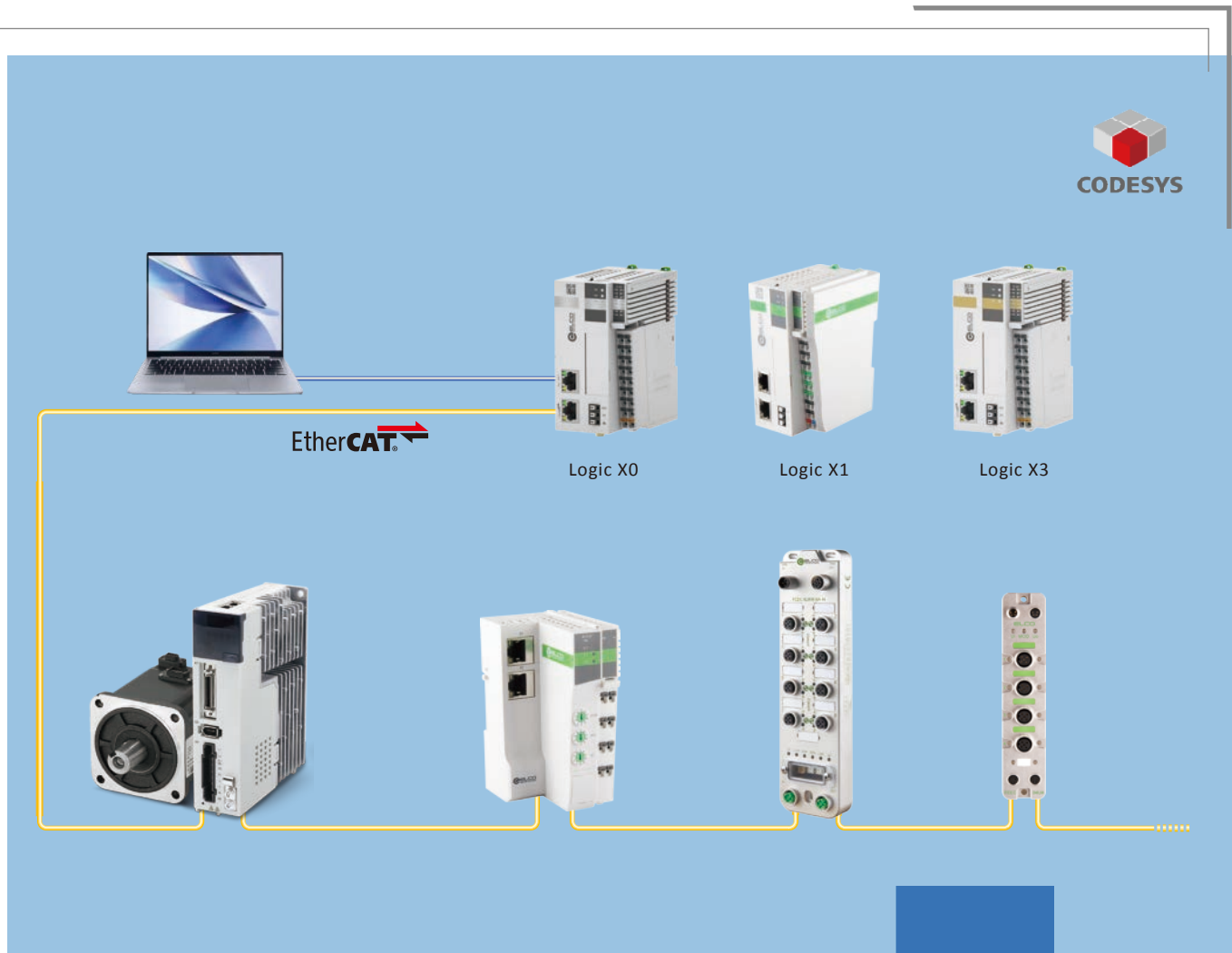
The newly launched LogicX series PLC further enriches ELCO's automation product portfolio and brings more choices for customers. The controller uses the latest Runtime system of CODESYS. The open and standard programming platform adopts CODESYS V3.5 SP19, which is in line with mainstream programming trends.

PLC

Logic X series PLC

Logic X0 Small Logic PLC

- High Real-Time operating system
- Support Modbus RTU/TCP master and slave stations
- Support CANopen master station (optional)
- Optional support EtherCAT master station (bus axis not supported), with a max. 32 EtherCAT slave station of IO
- Programspace 2 M, dataspace 512 KB
- Data variable support: I \ Q \ M area variables
- Support local 100 K high-speed pulse output
- Support local 100 K high-speed counter
- Support up to 512 points, local 16 points
- Programming language:ST \ LD \ CFC \ FBD \ SFC
- Support RS485, RS232, TF card
- Modular design, support high-speed backplane bus expansion with diverse modules such as DI, DO, AI, AO, temperature acquisition, pulse input, RS485 communication, etc.

Logic X1 Small PLC

- For EtherCAT Small PLC with motion control
- Support EtherCAT master station (Max. 16 axis), with a max. connection of 72 EtherCAT slave stations of IO
- Support Modbus RTU/TCP master and slave stations
- Programspace 16 M, dataspace 8 M
- Support local 200 K high-speed pulse output
- Support local 200 K high-speed counter
- Support over 3000 points, and local 16 point PNP and NPN, optional high-speed IO
- Support PLCopen motion control specifications for single axis motion, electronic gears, and electronic camshafts.
- Programming language:ST \ LD \ CFC \ FBD \ SFC
- Support RS485, RS232, Type-C USB and TF card
- Modular design, support high-speed backplane bus expansion with diverse modules such as DI, DO, AI, AO, temperature acquisition, pulse input, RS485 communication, etc

Logic X3 Medium Motion Control PLC

- For EtherCAT Medium PLC with motion control
- Support EtherCAT master station (Max 32 axis), with a max. connection of 72 EtherCAT slave stations IO
- Support Modbus RTU/TCP master and slave stations
- Programspace 64 M, dataspace 8 M
- Support local 200 K high-speed pulse output
- Support local 200 K high-speed counter
- Local 16 point PNP and NPN, optional high-speed IO
- Support PLCopen motion control specifications for single axis motion, electronic gears, electronic cams, CNC G code control / Robot control, linear interpolation/circular interpolation/spiral interpolation.
- Programming language:ST \ LD \ CFC \ FBD \ SFC
- Support RS485, RS232, Type-C USB and TF card
- Modular design, support high-speed backplane bus expansion with diverse modules such as DI, DO, AI, AO, temperature acquisition, pulse input, RS485 communication, etc

SERVO

Servo

Servo Drivers

- Comfortable tools: parameter configuration, self-learning, curve analysis, etc
- 125 μs bus cycle on EtherCAT, less than 1 μs wobble time
- Flexible IO functions DI / DO / AI / AO High-speed DI 16-bit high-precision AI
- Voltage of 1/3 AC 220, 3 AC 380 , DC
- Quick and convenient wiring, crimping type terminals, anti vibration
- Integrated rigid meter tuning, automatic tuning vibration suppression, etc
- Encoder types 17 / 23 / 25 magnetic / optical increment absolute
- High dynamic responsiveness, current period 1.6 μs, position loop period 125 μs, speed loop frequency response 2.5 kHz

Servo Motors

- High performance rare-earth material permanent magnet motor
- With optional high, medium, and low inertia, excellent dynamic response
- Extremely low cogging torque characteristics, smooth at low speeds
- Output shaft oil seal protection, optional electromagnetic brake
- IP65 or IP67, Class B or F insulation
- Multi turn absolute value encoder
- Incremental encoder
- 300% overload

Fieldbus Freqence Converter

- Control object: Standard V/F control of three-phase asynchronous motor
- Frequency output range 0-600Hz
- VF feature selection / frequency point jump / acceleration & deceleration ramp time
- Torque compensation
- Catch start / S-slope curve / DC braking
- Carrier frequency adjustment
- Undervoltage, overcurrent, overvoltage protection, overcurrent speed limit function
- 150% rated current for 60 s, 180% rated current for 3 s, instantaneous 200%

Compact67

Compact 67

Introduction:

I/O systems used in harsh environments:

Standard 60 mm and slim 30 mm distributed I/O provide a reliable, trusted solution for connecting controllers and fieldbus I/O system in harsh environments. Based on a 30 / 60 mm wide IP67 protective housing, fast and reliable standard connector connection, the module's internal insulating material encapsulated, can be installed in a standardized manner, and safely and reliably operated in the harsh working environment where water, dust and vibration may occur, meanwhile supporting standard industrial fieldbus, rich I/O configuration, good channel protection and online diagnostics make it suitable for applications such as metallurgy, automotive, and material transportation.

Application: • Metallurgical industry • Automotive industry • Material transportation • Machine tool industry • Packaging industry

Classic Modules

• Classic design saves space for direct installation of mechanical device

• Fast, reliable connector connection

• Support PNP and NPN input

• Freely configurable I/O combination

• LED display

• Online diagnosis of modules and channels

Slim Modules

• IP67

• For small and narrow installation space

• M8 interface for power supply and network

• Independent hub that can be directly connected to PLC

• LED status display, channel-level protection and diagnosis
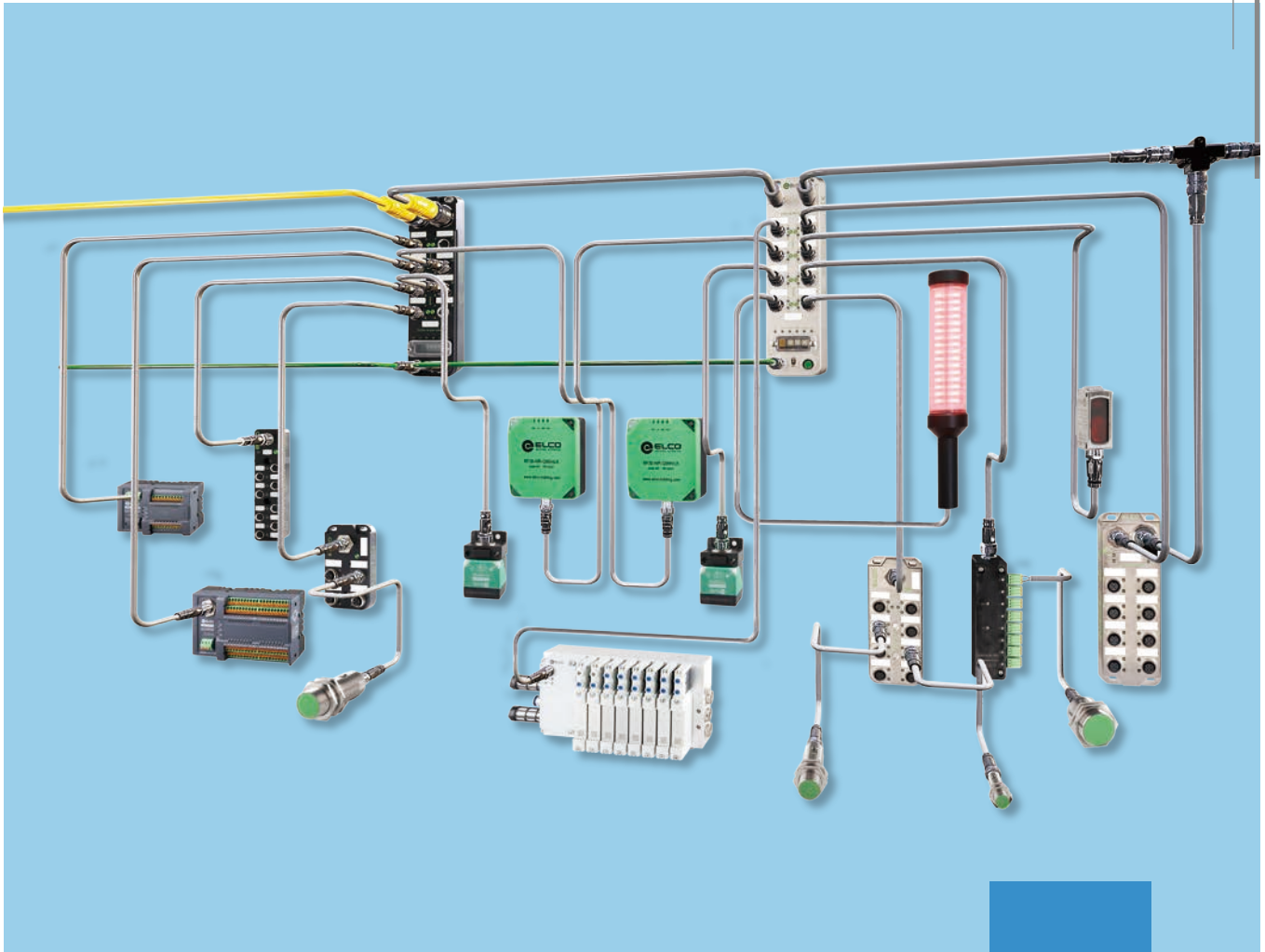
Digital module   Analog module

IO-Link Master

ELCO provides you with comprehensive IO-Link system solutions, including IO-Link standard Master, metal housing Master, IP67 digital hub supporting IO-Link, IP20 digital and analog hub, IP20 digital mini hub, high-frequency RFID supporting IO-Link, etc., helping customers improve the performance of production lines, achieve efficient data collection and transmission, ensure safe communication, and cost control.

IO-Link

IO-LINK

IO-Link Master

Features:

- The IO-Link Master supports 8 IO-Link interfaces in the form of Class-A or Class-B
- Complies with the requirements of IO-Link v1.1.2
- Support 3 communication rates: COM1 (4.8 kbps), COM2 (38.4 kbps), and COM3 (230.4 kbps)
- Support mainstream industrial Ethernet bus protocols such as Profinet, EtherCAT, Ethernet/IP
- Can connect various IO-Link standard devices and switching signals
- Standard and metal housing optional
- LED status display, protection and diagnosis in channel level

IO-Link IP67 Digital Hub

- Complies with the requirements of IO-Link v1.1.3
- Support COM2 (38.4 kbps) communication rate, compatible with ELCO or third-party IO-Link Masters
- IP67 field-level hub is used to collect and control switch input and output signals on-site. It can connect up to 16 switch signals and can connect various IO-Link equipment and standard switch signals
- Multiple IO and 16-point input and output configurable modules
- Standard 0.5 A output current, L-CODE auxiliary power supply slave module optional, max. 2 A per channel
- LED status display, protection and diagnosis in channel level

IO-Link IP67 Hub with Auxiliary Power Supply

Features:

- IO-Link Version 1.1.3

- Support rates: COM2

- L-CODE auxiliary power supply with greater load driving capacity

- Auxiliary power supply

- PNP type I/O signal

IO-Link IP20 Hub

IO-Link

IP20 IO-Link hub product based on DIN rail installation in the cabinet, which meets the IO-Link V1.1.3 standard, including standard 32-point digital, 16-point compact, and 4-channel analog products. To maximize the applicability of the product, each product can choose an industrial M12 circular interface or terminal to realize IO-Link communication. When driving large loads, auxiliary power supply can be selected, and for the convenience of supplying power to sensors, equipotential terminal is optional, no additional terminal required.

32 & 16 digital IO-Link Hub

- 4 pins or M12 connection

- Optional equipotential terminal, convenient for sensor power supply

- Installation of 35 mm rail or hole installation

- Optional auxiliary power supply - provides 2 A output version

- Resolution of 16 bit, accuracy of 0.3%

- Input signals 0 ... 20 mA, 4 ... 20 mA, 0 ... 10 V, ±10 V

- Output signals 0 ... 20 mA, 4 ... 20 mA, 0 ... 10 V, ±10 V

IO-Link

4 AI/AO IO-Link Hub

Features:

- Resolution of 16 bit, accuracy of 0.3%

- Input signals 0 ... 20 mA, 4 ... 20 mA, 0 ... 10 V, ±10 V

- Output signals 0 ... 20 mA, 4 ... 20 mA, 0 ... 10 V, ±10 V

IO-Link IP20 Mini Hub

Mini Hub is the most compact IP20 hub in IO-Link solutions. It adopts a standard M12 A-code interface, which meets the IO Link V1.1.3 standard. It has 3 pluggable terminals for easy installation and maintenance. 8DI and 4DI/4DIO, making it particularly suitable for small control cabinet, remote control cabinet, and other application with limited installation space.

Features:

- Compliant with IO Link V1.1.3 standards

- 8 × 3 single row pluggable spring terminals

- Multiple IO types of 8DI, 4DI/4DIO

- Mini 108 × 25 × 22 mm

- Equipped with mounting bracket, easy to install

FX20

FX20 Series Distributed IO

- The FX20 series distributed IO consists of a bus coupler, IO modules and functional modules
- The coupler is compatible with multiple Ethernet bus protocols such as EtherCAT, Profinet, Ethernet/IP, CC-LINK IE FB, and can expand up to 32 modules
- IO and functional modules include digital input and output, relay output, analog input and output, temperature measurement, high-speed counting, IO-Link Master station, communication bridge ...
- Adopts high-speed 100 Mbps backplane bus technology, with high communication bandwidth and fast response speed
- The modules and terminals are detachable, tool-free for quick installation and wiring
- Terminal color system for clear identification
- LED alarm indicator, online diagnostic message

IP20 I/O

IP20

FB Series

- Wide body design, 32 digital I/O modules

- Input / output configurable modules optional

- Compatible with mainstream Ethernet bus systems such as Profinet, EtherCAT, Ethernet/IP, CC link IE Field Basic, etc

- Same number of equipotential terminals as I/Os, convenient for sensor power supply

- Detachable terminal design, tool free quick wiring

- Standard 35 mm DIN rail installation

- LED alarm indicator lights, online diagnostic message

PROFINET | EtherCAT | EtherNet/IP

FV Series

- Bookform design, suitable for compact installation space

- 32 digital I/O modules, input / output configurable modules optional

- Compatible with mainstream Ethernet bus systems such as Profinet, EtherCAT, Ethernet/IP, CC link IE Field Basic, etc

- Metal housing, more sturdy and durable

- Detachable terminal design, tool free quick wiring

- Standard 35 mm DIN rail installation

- LED alarm indicator lights, online diagnostic message

MVTG Series Valve Terminals

MVTG

- **Compact structure and better performance:**

MVTG series valve terminal adopts compact design, with compact solenoid valve, the size is smaller, which greatly saves the space of the industrial automation system and reduces the production cost of the enterprise. At the same time, the main gas circuit design is optimized to reduce the flow loss, the valve width is 14 mm, but the maximum flow rate can reach 770 L/min; Optimize the pilot air path to reduce the opening pressure. And its installation process is simple and fast, which reduces the difficulty of installation and maintenance of the system.

- **High stability and strong reliability:**

The valve terminal has excellent stability and reliability. Optimize the design of circuit board pins and female headers to effectively avoid poor contact; the LED display has a wide viewing angle, which can quickly check and identify the working status of the solenoid valve. It can operate stably in various harsh environments to ensure the smooth progress of industrial automation processes.

- **Rich communication protocols and convenient valve body configuration:**

MVTG series valve terminals support a variety of communication protocols, such as IO-Link, Profinet, Ethernet/IP, CC-link IEFB, etc., which is convenient for data exchange and integration with other industrial automation equipment. And it can be matched with 8 types of high-flow solenoid valves at will, and the valve body itself supports up to 24 dual-control solenoid valves. In-port and out-of-the-wheel pilot functions can also be quickly implemented by interchanging plugs and pins, providing users with more flexible options and improving overall performance and flexibility.

- **Remote monitoring and diagnosis function:**

The valve terminal also supports remote monitoring and diagnosis function, which is convenient for enterprises to understand the operation status of equipment in real time, and find and solve problems in time. This greatly improves the production efficiency and product quality of the enterprise.

- **Rich functions and easy to use:**

The valve terminal can be replaced with three valve terminal nodes, namely IO-Link valve terminal node, multi-protocol valve terminal node and multi-protocol valve terminal node with IO-Link master function. Among them, the valve terminal node with IO-Link master function carries a 2*32 Byte IO-Link master interface (CH1 / CH2), which can easily connect IO-Link slave devices, making it more convenient and faster for customers to connect sensors, loads and other devices in the field, and save costs.

25

MVTG Series Valve Terminals

IO-Link Valve Terminal

- Complies with IO-Link version 1.1 requirements, featuring a Class-B interface
- Supports up to 24 valve positions
- Can be paired flexibly with eight high-flow solenoid valves
- LED status display, point diagnostics
- IP65

Multi-protocol Valve Terminal

- Supports mainstream industrial communication protocols: Profinet, Ethernet/IP, EtherCAT, CC-Link IE Field Bus
- Supports up to 24 valve positions
- Can be paired flexibly with eight high-flow solenoid valves
- LED status display, point diagnostics
- IP65

Integrated Multi-protocol Valve Terminal with IO-Link Master Station

- Supports mainstream industrial communication protocols: Profinet, Ethernet/IP, EtherCAT, CC-Link IE Field Bus
- Integrates two IO-Link master station interfaces, allowing flexible expansion of IO-Link devices
- Supports up to 24 valve positions
- Can be paired flexibly with eight high-flow solenoid valves
- LED status display, point diagnostics
- IP65

RFID

RFID

- RF30 series HF RFID product introduction

- RF30 high-frequency series of products by the read / write head and data carrier

- RF30 read / write head products through the master expansion, compatible with EtherCAT, Profinet, Ethernet/IP, CC-LINK IE FB and other mainstream Ethernet bus protocols

- Operating frequency 13.56 Mhz, conforms to ISO 15693 standard

- IO-Link protocol products are available in 32 bytes and 10bytes versions, complying with IO-Link V1.1.3 communication standard

- RS-485 products are compatible with Modbus RTU protocol for more flexible application scenarios

- LED status indicator, error diagnostic message

RFID

Q95H / C40H

Features:

- Selectable IO-Link / RS-485 protocols

- Multiple status indicators

- Metal-free (clear zone)

- Rotatable mounting bracket

- Recognition distance 0 ... 120 mm

  (subject to tag environment)

M30H / MF30H
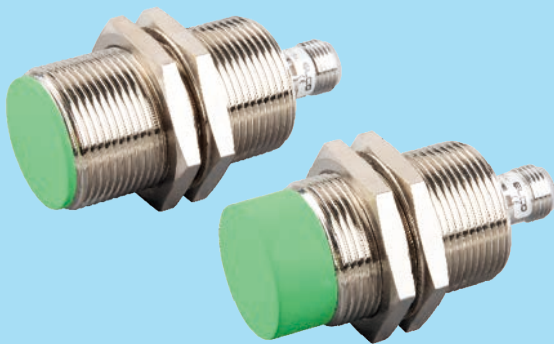
Features:

- Selectable IO-Link / RS-485 protocols

- Single indicator light

- Metal-free (clear zone)

- Oerall dimensions Ø 30 × 46 mm

- Recognition distance 0 ... 70 mm (subject to tag environment)

Connectivity

I/O connectors

- M8 interface 3-pin, 4-pin; A-code

- M12 interface 3-pin, 4-pin, 5-pin, 8-pin, 12-pin; A-code, B-code, L-code

- Straight, angled; single-ended, double-ended, Y-Splitter

- PNP or NPN LED

- The length and material of cable can be customized

- IP67

Automation connectors

- Profinet, M12 interface D-code, X-code;

M8 interface D-code, A-code; RJ45 interface

- CC-Link M12 interface A-code

- Profibus M12 interface B-code

- Devicenet M12 interface A-code; 7/8 interface

- Straight, angled; single-ended, double-ended

- The length and material of cable can be customized

- IP20 (RJ45), IP67

Connectivity

CONNECTIVITY

Power connectors

- M12 interface 5-pin; L-code
- 7/8 interface 3-pin, 4-pin, 5-pin
- Straight, angled; single-ended, double-ended
- The length and material of cable can be customized
- IP67

Field-attachable connectors

- M8 interface 3-pin, 4-pin, A-code
- M12 interface 4-pin, 5-pin, 8-pin, 12-pin, A-code, B-code, D-code, L-code
- 7/8 interface 3-pin, 4-pin, 5-pin
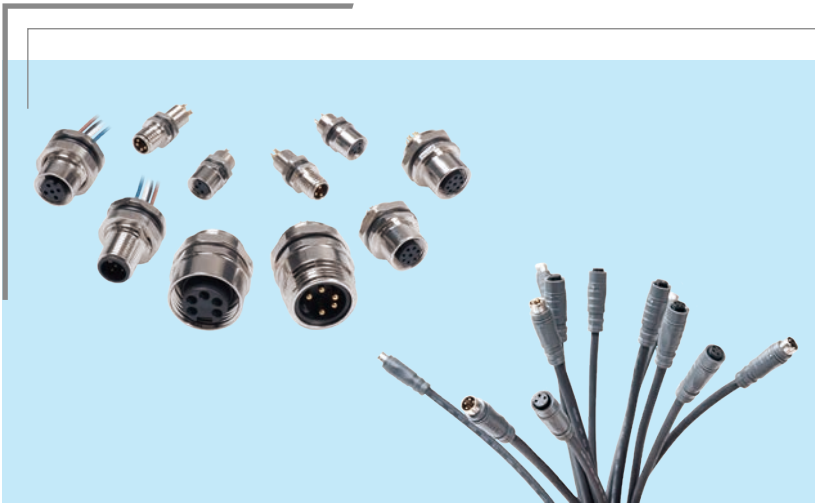- Straight, angled
- Metal, plastic
- IP67

IDC connectors

- M8 interface 3-pin, 4pin, A-code
- M8 interface 4-pin, A-code
- Female, male
- IP67

PUSH-PULL connectors

- Flange, Pre-wired
- M12 interface, 4-pin, 5-pin,A-code
- Internal locking, external locking
- Female, male
- Shield for Pre-wired
- IP67

Other connectors

- Flange connector, M8, M12, 7/8 interface
- Rear panel installation / front panel installation
- Ø 8 A-code, female, straight, angled
- The length and material of cable can be customized
- IP67

Distribution box

- M8 interface provides 5 channels (ports) of 4, 6, 8, 10, and 12
- M12 interface provides 3 channels (ports) of 4, 6, and 8
- Direct output cable, M12, M23, terminal
- PNP, NPN, analog output, solenoid valve special output mode
- Special terminal connection series, can provide dual drive power supply products
- IP67

Safety Product

Safety Light Curtain
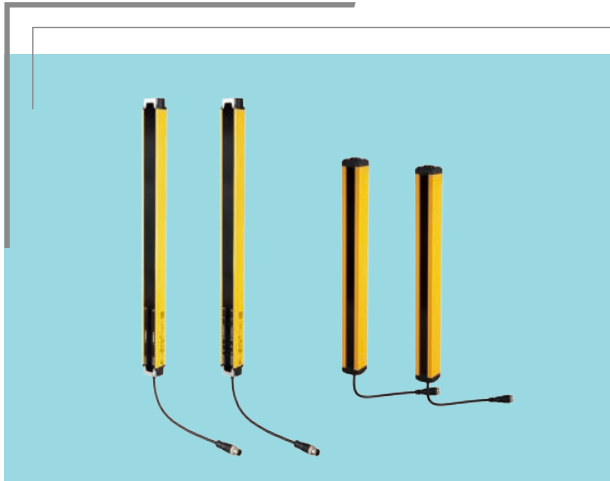
- TYPE 2, TYPE 4 IEC ISO13849-1, IEC 61508
- Metal slim housing, durable
- Distance: Max.19 m
- Rich product specifications, protection height: 150 ... 1800 mm
- Multiple resolutions are optional: 14, 30, 50, 90 mm
- EDM function
- Automatic / manual reset function
- Applied to machine tools, automobiles, logistics, printing and packaging, rubber and plastic machinery and other industries

Safety Scanner

- Scanning range: 0-275°
- Safety Operating Range: Max. 5.5 m
- Warning zones up to 40 m
- 30 / 40 / 50 / 70 / 150 mm selectable detection capability
- Partial dynamic muting
- Metal brackets allowing full orientation and fast replacement

Obstacle Avoidance & Measurement Laser Radar

- Compact size
- Scanning Range: Max. 40 m
- Large scanning range: 0-270°
- No blind area,reliable detection near the window
- Excellent anti-light interference performance
- Multi-user monitoring, 4 customers can access the configuration software at the same time

Safety Relay Module

- Type 4, ISO 13849; Sil 3, IEC 61508

- Compact design, 22.5 mm

- Various coil voltages and output contacts are optional, 24 V AC/DC

- Single / double channel input are optional

- LED display channel 1, channel 2 working status

- 1N.O + 1N.C, 2N.O, 3N.O + 1 N.C, 4N.O

- Automatic / manual reset are optional

- Applied to the control of dangerous movement, such as automobile, port, wind power, rail transit, printing and packaging industries, etc

Cascade Safety Relay Module

- Rich series of safety relay module, Emergency-Stop Module, Time independent Module, Two-handed Module

- Multiple operation modesoptional

- Equipped with additional contact extension module

- Simple configuration for fast connection allocation

- LED displays operation status, rapid diagnosis of abnormalities

- Pluggable terminal, easy to operate and maintain
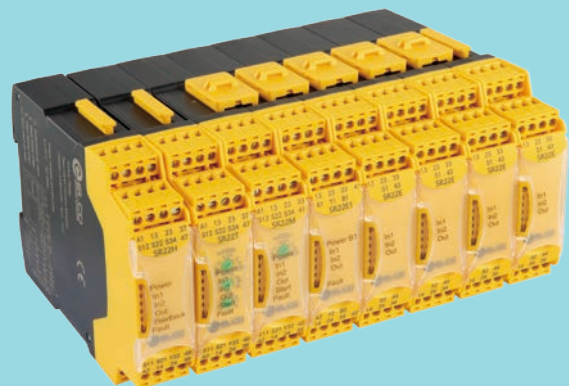
Safety Product

SAFETY

Safety Lock & Safety Switch

SL100: Safety Lock

- Working mode: Mechanical locking

  Electromagnetic locking

- Switch adjusted in all four direction

- Powerful locking force: Max. 1200 N

- Multi contact output: 4 Con, 6 Con

- LED working status: power, locking or releasing

- Wide range actuator travel distance

- Protection degree: IP67

SW100: Safety Switch

- Switch End adjusted in all four direction

- Multi contact output: 3NC, 1NO + 2NC, 2NO + 1NC

- Wide range actuator travel distance

- Wide temperature range: -40 ... +80 °C

- Protection degree: IP65

RFID Safety Lock

- RFID technology, to ensure higher security and confidentiality

- Working mode: Mechanical locking

  Electromagnetic locking

- Powerful locking force: Max. 2000 N

- Multiple functions: It also has the function of locking a nd monitoring

- Multiple encoding methods: unique encode and universal encode methods are optional

- Independent redundant dual output

- Self-test cross and mutual test design is adopted

- Flexible installation
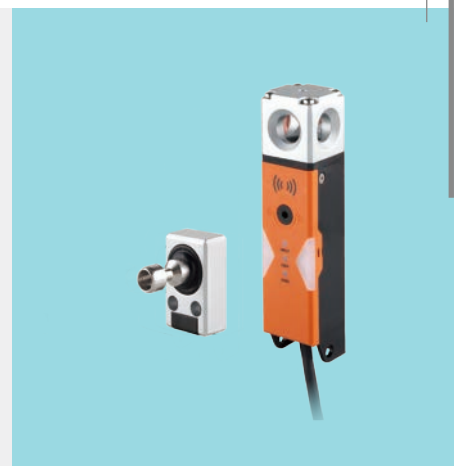
RFID Safety Switch

- RFID non-contact safety door switch
- Compact size, easy to install
- Unique encode and universal encode methods are optional
- Cascading scheme is optional
- High cost performance advantage
- The magnetic holding force can reach 15 N, which can replace the door magnetic
- EDM detection function, manual reset / automatic reset optional

E-Stop Button

- Anti drop function

The normally closed contact module has monitoring function

- Contact module optional combination

Muti contact models selection to save time and costs

- One click installation function

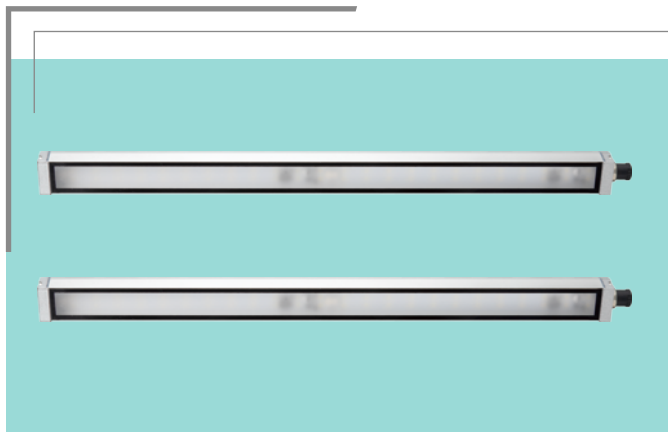The installation of the contact module terminal block is fast

and convenient

- High security degree

Certified by authoritative institutions, with high reliability
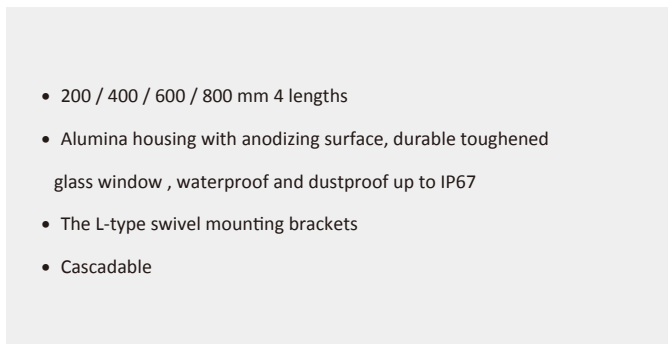
and security

Industrial lighting

LF32 Strip lighting

- 250 / 500 / 750 / 1000 mm 4 lengths
- Alumina housing and durable glass window, waterproof and dustproof up to IP65
- The L-type swivel mounting brackets
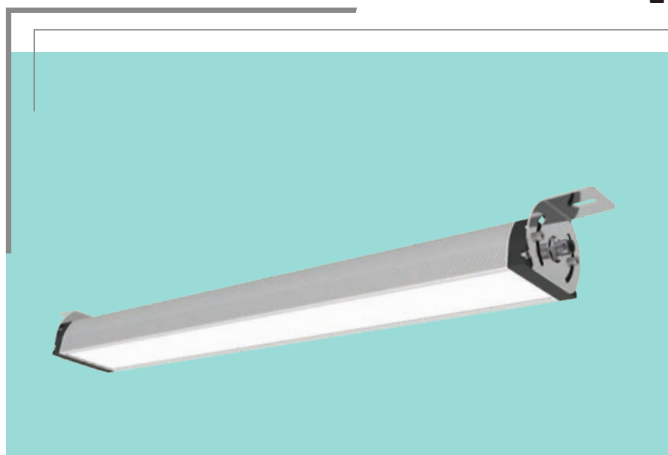- Stand-alone and cascadable models available

LF48 Strip lighting

- 200 / 400 / 600 / 800 mm 4 lengths
- Alumina housing with anodizing surface, durable toughened glass window , waterproof and dustproof up to IP67
- The L-type swivel mounting brackets
- Cascadable

LL76 Integrated lighting

- 300 / 600 / 900 / 1200 mm 4 lengths
- LED Module and driver integrated design, compact structure, easy to install, 2 fluorescent lamps with equal length can be replaced directly
- High-performance PMMA diffusers, uniform and soft light
- Isolated constant current driver for flicker-free, safe and reliable
- The L-bracket can adjust the angle within ±45° to illuminate the target surface and improve light utilization

Indicator

PG50 Signal Tower light

- Integrated tower light with simple and generous shape
- Diameter 50 mm, and the 1 segment / 3 segments are available with different heights. Different colors are available, single segment that can display RGB 3 colors, the color of three segment from top to bottom are red, yellow, green
- Input voltage: 24 V DC
- Alarm buzzer is available
- Cabled and quick-disconnect models available
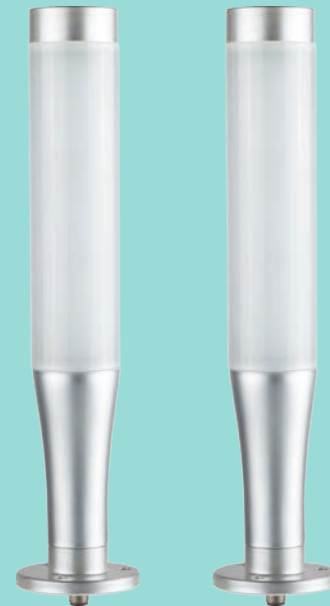
PR30 / PR50 / PR90 Bulb Indicators

- RGB 3 or more colors
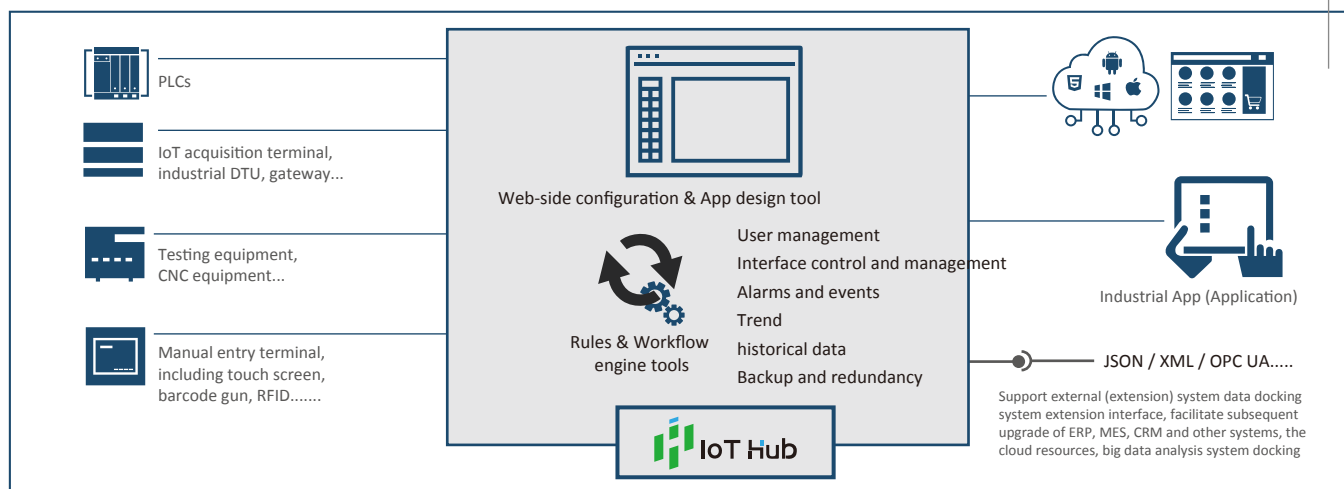- Body diameter 30 mm, 50 mm, 90 mm

Industrial software

Elco IoT Hub, empowering the Industrial Internet Platform

In November 2017, the State Council issued the "Opinions on deepening the development of ' Internet + Intelligent Manufacturing 'of industrial Internet", and proposed that the future development goal of China's industrial Internet is to initially build industrial Internet development capability, strengthen the comprehensive and deep application of industrial Internet in different industries, and the Ministry of Industry and Information Technology also proposes that we should promote the software development of industrial technology and the millions of industrial APP projects to install a "new engine" for intelligent manufacturing in China.

In May 2018, Elco released the IoT Hub Industrial Internet Empowerment Platform, which combines the IoT, information technology and automation technology to promote the development strategy of intelligent manufacturing to a new level of industrial Internet. Based on industrial software technology, build a data ladder to accelerate the further integration of manufacturing IT and OT, thereby accelerate the process of manufacturing digital factory.

IoT Hub Functions

PLCs

IoT acquisition terminal, industrial DTU, gateway...

Testing equipment, CNC equipment...

Manual entry terminal, including touch screen, barcode gun, RFID.......

Web-side configuration & App design tool

Rules & Workflow engine tools

User management
Interface control and management
Alarms and events
Trend
historical data
Backup and redundancy

IoT Hub

Industrial App (Application)

JSON / XML / OPC UA.....

Support external (extension) system data docking system extension interface, facilitate subsequent upgrade of ERP, MES, CRM and other systems, the cloud resources, big data analysis system docking

IIoT Hub empowering application

IoT resource connection management platform application	Digital Factory Platform Application	Device Industry Internet Empowering Platform Application
• As a device management platform for IOT, DMP gives priority to cloud-based deployment, providing public access to Elco IoT terminals and user-private IoT access management applications (private cloud or proprietary cloud). • Remote monitoring, configuration adjustment, software upgrade, system upgrade, fault detection, life cycle management and other functions for IoT terminals; • Provide real-time gateway and application status monitoring alarm feedback, and provide support for pre-processing of faults; • Open API call interface helps customers to easily integrate systems and develop value-added functions.	• Provide industrial Internet "landing" empowering applications for manufacturing enterprises; • Combining Elco information solution, provide lightweight MES system, integrate IT technology with OT technology to realize real-time and efficient data collection and interaction among multi-source devices, heterogeneous systems, operating environments, and operational workers; • App's micro-service function visualizes production data locally or in the cloud, and uses big data analysis technology to give new applications to data; • It is suitable for the "landing" application of typical intelligent manufacturing solutions, and achieves rapid implementation and application. Less investment, quick results.	• Combining the device's own interface management, control module, alarm and event management module, business logic engine tool and data storage functions, make data logic analysis on device system docking and terminal, connection management; • Provide developers with Industrial App rapid generation tool WorkBench to implement intelligent gateway or edge host system for edge layer empowerment; • PaaS layer provides empowering interface and application support for device, resources, operation and maintenance, fault recovery, application development and other management modules.

Industrial Wireless

Industrial Wireless Routers

For industrial wireless communication application scenarios, Eloc provides industrial wireless networking and wireless data link construction solutions through industrial routers to realize the networking and data aggregation needs of on-site machines and devices at the edge layer of the industrial Internet.

• Network Connection

Network connection scheme supports 5G, 5G + WIFI version optional, supports WiFi5, WiFi6 scheme optional, enhanced 5G NR, frequency locking network locking, etc.

• Communications enhancement

Supports 5G and WiFi network switching, supports 2.4 GHz and 5 GHz dual-band WiFi, and strengthens the roaming function between wireless APs

• Adaptive Applications

Support multi-port solution, support antenna adaptation customization, convenient terminal access networking

• Industrial Grade Reliability

Industrial metal housing, supports lug or rail mounting, IP20

Industrial Wireless AP

For industrial wireless network coverage scenarios, ELCO provides a full range of WiFi coverage solutions using wireless APs to fulfill the needs of on-site machine and device networking and data aggregation at the edge layer of the industrial Internet.

• Network Connection

Support WiFi5, WiFi6 program optional

• Roaming Function

Support 2.4 GHz, 5 GHz dual-band WiFi, support WiFi roaming function

• Adaptive Applications

Supports multiple network port solutions and a variety of high gain antennas

• Industrial Grade Reliability

Industrial metal housing, supports lug or rail mounting, IP20