IO-LINK

PLUG. SET. PLAY.

IO-Link

RAFI

WE CONNECT HUMAN ACTIONS WITH IO-LINK

Enterprise level

Operations control level

Process control level

Control level

Field level

The direction in automation is clear: more networking and data, less complexity. That's why **IO-LINK** has become established as a standardized, fully bus-independent interface at sensor and actuator level. At RAFI, we are dedicated to maintaining our reputation as a technology leader and actively supporting our partners on their journey into the future.

Our **IO-LINK products** offer you a smooth entry. Using standardized M12 plugs, you can integrate these products into your existing environment fast. Easily connected and individually parameterized, our control and signaling units give you countless possibilities. The **TILTED DIAMOND⁺** and **E-BOX** IO-LINK types equip you today for tomorrow's challenges.

ERP

MES

SCADA

PLC

PROFIBUS, PROFINET, EtherNet/IP, EtherCAT, Modbus, ASI, ...

GATEWAY / MASTER

IO-LINK MASTER

Standard Sensors
Standard Actors

E-BOX
IO-LINK

TILTED DIAMOND®
IO-LINK

IO-LINK
Sensors

IO-LINK
Actors

PLUG.
SET.
PLAY.
REPEAT.

The IO-LINK portfolio from RAFI impresses with fast integration and flexible parameterization. We show you how you and your customers benefit from this equally.

E-BOX IO-LINK
The combination of IO-LINK and control device box is unique on the market – especially in this quality.

YOUR BENEFITS AT A GLANCE

PLUG & PLAY

- The M12 terminal enables rapid assembly and commissioning
- You benefit from shorter downtimes thanks to quick device replacement
- No need to worry: Thanks to IO-LINK, our portfolio is bus-independent and can be integrated in all field buses worldwide
- The minimal wiring work saves you time and money
- No need to manufacture expensive special connectors
- Lower personnel costs: Mistakes during wiring are not possible, so even untrained employees can perform installation

RELIABLE & SAFE

- Retrievable device diagnosis data enables predictive maintenance
- Fewer maintenance errors thanks to device identification: Incorrectly installed devices are reported to the control unit

CONVENIENT PARAMETERIZATION

- Reduced product variety: Parameterize the button color, brightness and flashing modes with ease via the control unit
- Simple replacement: Stored parameters are automatically transferred to new devices
- World innovation: The first button box available with IO-LINK

TILTED DIAMOND⁺ IO-LINK
The ultra-bright signal lamp is quickly
assembled and vibration-resistant.

PROFITABILITY IN ALL AREAS

- The system designer can refer to standards and respond flexibly to customer wishes with regard to button color, lighting modes and labelling
- Parameterization covers all types. That means fewer products for Purchasing to manage and earlier achievement of economies of scale
- Fewer products means less storage space and capital tie-up
- Due to the parameterization and reduced work for commissioning and assembly, production can remain constant over all machine types
- Management benefits from optimized processes, reduced downtimes and greater system availability
- Customer Service works faster, with fewer mistakes. Staff in spare parts logistics also benefit from the standardized hardware. Predictive maintenance is also possible.
- Simple wiring with an unshielded, three-core cable saves time and money
- The diagnosis function enables the production line foreman to identify and remedy mistakes quickly

FACTS AND FIGURES

ASSEMBLY

E-BOX IO-LINK
• On aluminum profile using the assembly clip
• The assembly clip can also be screwed onto other surfaces

TILTED DIAMOND⁺ IO-LINK
• Screw fastening from below
• Optionally with support tube and mounting base

PARAMETERIZATION

E-BOX IO-LINK
• Night mode with different brightness levels
• Flexible color selection: 5 standard colors plus 3 freely selectable RGB colors
• 4 different flashing modes
• Can be diagnosed via the control unit

TILTED DIAMOND⁺ IO-LINK
• Night mode with different brightness levels
• Flexible color selection: 5 standard colors plus 3 freely selectable RGB colors
• 8 different flashing modes
• Can be diagnosed via the control unit

All details are available to download at rafi-group.com/io-link or in our eCatalog

ARTICLE NUMBERS

E-BOX IO-LINK
• 1.24.100.001/0000
  1 pushbutton, white bezel, with RGB-LED
• 1.24.200.001/0000
  2 pushbuttons, white bezel, with RGB-LED

TILTED DIAMOND⁺ IO-LINK
• 1.69.010.101/1000

Other types available on request

TECHNICAL DATA

PROTECTION CLASSES
• E-BOX IO-LINK: IP 65
• TILTED DIAMOND⁺ IO-LINK: IP 66, IP 67

OPERATING VOLTAGE
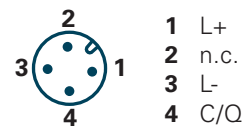• 18 – 30 V

OPERATING CURRENT
• max. 200 mA

IO-LINK
• Interface and System Specification Version 1.1.2
• IODD to download at rafi-group.com/io-link or available in our eCatalog

TERMINALS
• M12 4-pin

PIN ASSIGNMENT

1	L+
2	n.c.
3	L-
4	C/Q

OPERATING TEMPERATURE
• -30°C to +60°C

ILLUMINATION
• RGB LEDs

APPROVALS

CE   c UR US

E-BOX IO-LINK DIMENSIONS
• Outside dimension, length: 123.2 mm
• Outside dimension, width: 40 mm
• Outside dimension, height: 35.6 mm

TILTED DIAMOND⁺ IO-LINK DIMENSIONS
• Mounting depth: 14.5 mm
• Mounting height: 70.1 mm
• Collar dimension: 56.8 mm

Full data in eCatalog
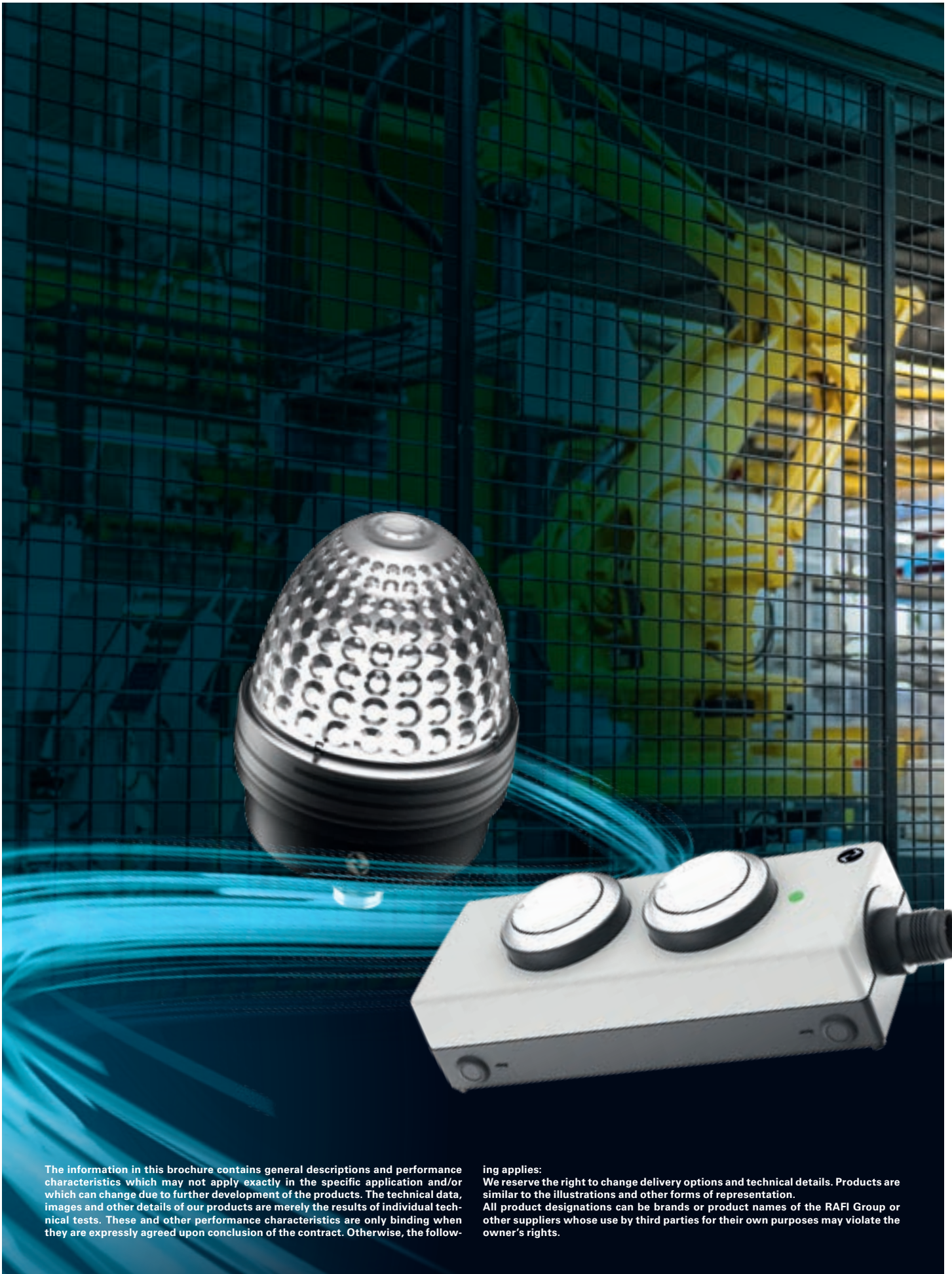
ACCESSORIES

E-BOX IO-LINK
• FLEXLAB labelling sheet for individual legending

TILTED DIAMOND⁺ IO-LINK
• Mounting base
• Support tubes in various lengths and angled

"FAST INTEGRATION AND CUSTOM PARAMETERIZATION ENSURE SEAMLESS INTEGRATION OF RAFI'S IO-LINK PORTFOLIO IN PROCESSES."

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