

CONTRINEX Smart Photoelectric Sensors

Overview

The Contrinex Smart Photoelectric Sensors offer numerous advanced features such as IO-Link connectivity, multi-mode functionality, and robust construction. These sensors provide enhanced operational flexibility, data availability, and efficiency in automated processes.

Features

- Connector types 4-pin M12 or 4-pin M8 quick-disconnect, (purchase cable separately)
- Complete overload protection
- 304 stainless steel housing material
- Mounting hardware included
- IO-Link v1.1



Photoelectric Sensors											
Part Number	Price	Sensing Distance mm [in]	Light Emission	Logic	Operation Mode	Power Consumption (no load)	Switching Frequency	Connection Type	Housing Size mm [in]	Weight g [oz]	Drawing Link
Polarized Retroreflective											
<u>ISRR-M18MP-NMS-A0</u>	\$89.00	30–7000 [1.18–275.59]	Visible red 630nm	PNP	Selectable light-on/ dark-on	≤ 15 mA	≤ 1000 Hz	4-pin M12 quick-disconnect	18 [0.70] diameter x 27 [1.06] body	14 [0.49]	<u>PDF</u>
Diffuse											
<u>ISTR-C23MP-NMS-A0</u>	\$89.00	5–1200 [0.20–47.24]	Visible red 630nm	PNP	Selectable light-on/ dark-on	≤ 25 mA	≤ 1000 Hz	4-pin M8 quick-disconnect	22 x 14 x 33 [0.87 x 0.55 x 1.30]	20 [0.70]	<u>PDF</u>
<u>ISTR-M18MP-NMS-A0</u>	\$89.00	5–1000 [0.20–39.37]						4-pin M12 quick-disconnect	18 [0.70] diameter x 27 [1.06] body	14 [0.49]	<u>PDF</u>
Diffuse with Background Suppression											
<u>ISHR-M18MP-NMS-A0</u>	\$139.00	10–250 [0.39–9.84]	Pinpoint LED 640nm	PNP	Selectable light-on/ dark-on	≤ 25 mA	≤ 500 Hz	4-pin M12 quick-disconnect	18 [0.70] diameter x 27 [1.06] body	14 [0.49]	<u>PDF</u>
<u>ISHR-C23MP-NMS-A0</u>	\$139.00	10–300 [0.39–11.81]						4-pin M8 quick-disconnect	22 x 14 x 33 [0.87 x 0.55 x 1.30]	20 [0.70]	<u>PDF</u>
<u>IDDR-M18MP-NMS-A0</u>	\$219.00	10–150 [0.39–5.90]						4-pin M12 quick-disconnect	18 [0.70] diameter x 27 [1.06] body	14 [0.49]	<u>PDF</u>
<u>IDDR-C23MP-NMS-A0</u>	\$219.00	10–200 [0.39–7.87]						4-pin M8 quick-disconnect	22 x 14 x 33 [0.87 x 0.55 x 1.30]	20 [0.70]	<u>PDF</u>

Note: Purchase cable separately.

Photoelectric Sensors					
Part Number	Response Time	Output Current	Sensitivity Adjustment mm[in]	Max. Tightening Torque	Protection Degree
<u>ISRR-M18MP-NMS-A0</u>	≤ 0.5 ms	≤ 100 mA	2500–7000 [98.42–275.59]	20 N·m	IP67
<u>ISTR-C23MP-NMS-A0</u>	≤ 0.5 ms	≤ 100 mA	Depend on each domain	2 N·m	IP67 IP68 IP69K
<u>ISTR-M18MP-NMS-A0</u>	≤ 0.5 ms	≤ 200 mA	Depend on each domain	20 N·m	IP67
<u>ISHR-M18MP-NMS-A0</u>	≤ 1 ms	≤ 200 mA	20–250 [0.78–9.84]	20 N·m	IP67
<u>ISHR-C23MP-NMS-A0</u>		≤ 100 mA	30–300 [1.18–11.81]	2 N·m	IP67 IP68 IP69K
<u>IDDR-M18MP-NMS-A0</u>		≤ 200 mA	20–150 [0.79–5.90]	20 N·m	IP67
<u>IDDR-C23MP-NMS-A0</u>		≤ 100 mA	20–200 [0.79–7.87]	2 N·m	IP67 IP68 IP69K



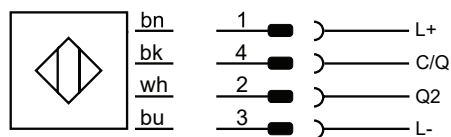
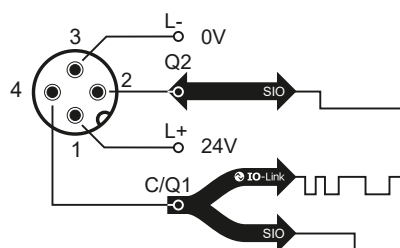
Smart Photoelectric Sensors

General Specifications	
Supply Voltage Range (U_B)	10–30 VDC
Residual Ripple	$\leq 10\% V_{pp}$
Short-circuit Protection	Yes
Voltage Reversal Protection	Yes
Cable Length Maximum	$\leq 20\text{m}$ (IO-Link) / $\leq 300\text{ m}$ (SIO - Standard Input/Output)
Operating Temperature ¹	-25 to +65 °C [-13 to +149 °F]
IO-Link Version	v1.1
Shock/Vibration	IEC 60947-5-2
Housing Material	304 stainless steel
Sensing Face Material	PMMA (Polymethyl methacrylate)
Agency Approvals	cULus NRKH.E239373, CE

¹ Maximum temperature according to UL: 70 °C.

Note: all data measured according to IEC 60947-5-2 standard with $U_B = 20$ to 30 VDC, $T_A = 23\text{ °C} \pm 5\text{ °C}$.

Wiring Diagram




PocketCodr

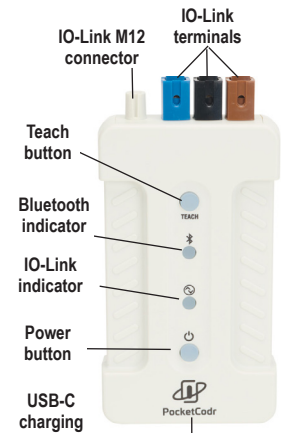
PocketCodr Tool

Overview

The PocketCodr Tool provides an easy way to configure any IO-Link device. The PocketCodr companion app allows you to see live device data and read parameters menu.

Features

- No-code IO-link sensor/device configuration
- Companion app for intuitive and easy status and live data viewing
- IO-Link v1.1
- Includes (1) USB-A to USB-C cable 500 mm [0.5 m], (1) 4-pin M12 male to female cable 600 mm [0.6 m] length, and a 30 day trial activation of Contrinex Suite Plan CTXSUITE



PocketCodr Tool				
Part Number	Price	Description	Weight	Drawing Link
<u>POC-CDR-M12</u>	\$195.00	PocketCodr programming tool, 24 VDC output. USB-A to USB-C cable and 4-pin M12 male to female cable, 30 day trial activation of Contrinex Suite Plan CTXSUITE included.	0.95 lbs (including carrying case)	PDF

Specifications	
Sensor Supply Voltage	24 VDC
Max. Sensors Supply Current	100 mA continuous, 500 mA for wake-up (Built-in current limit)
Output Types	PNP
Connection	M12 female connector without thread or 3 spring post terminals
Power Button	LED Green: System ON LED OFF: System OFF LED Green blinking 1 Hz - Low battery (<15%) LED Yellow Charging (while turned on)
IO-Link Indicator	LED yellow OFF - no IO-Link communication LED yellow ON - IO-Link sensor recognized
Bluetooth Indicator	LED Blue blinking 1 Hz - Bluetooth communication active, waiting for a connection (discoverable) LED Blue OFF - Bluetooth device connected
Battery	LiPo 7.4 V 650 mAh > 2hours for 50 mA sensors
Operating Temperature	-10 to +40 °C [+14 to +104 °F]
Charging Interface	USB-A to USB-C (included)
Buttons	Digital teach (requires the PocketCodr app and a compatible sensor) Power short press: Turn ON Power long press: Turn OFF
Automatic Switch OFF-10	After 2 minutes of non-use (no Bluetooth device connected)
Degree of Protection	IP40
Bluetooth Version	v4.2 and v5.0 compatible
Operating System Requirements	Google Android 7.0 or later Apple iOS 13.1 or later
IO-Link Version	v1.1
Agency Approval	CE, UKCA



PocketCodr

PocketCodr Suite Plan Subscription

Overview

The PocketCodr Suite Plan Subscription offers Action Widgets which can manage the parameters to provide a more userfriendly interface. Action Widgets guide users through their device configuration, such as teaching a setpoint, configuring sensor outputs, or setting up an alarm by following a simple graphical step-by-step workflow.

Compatible Action Widgets are device specific and may not be available with all devices. Action Widgets are only compatible with Contrinex Smart Sensors starting with the letter "I" in the part number.

Features

- No-code IO-link sensor/device configuration
- Companion app for intuitive and easy status and live data viewing
- Best-in-class action widgets
- Share programming easily with colleagues
- IO-Link v1.1



IO-Link

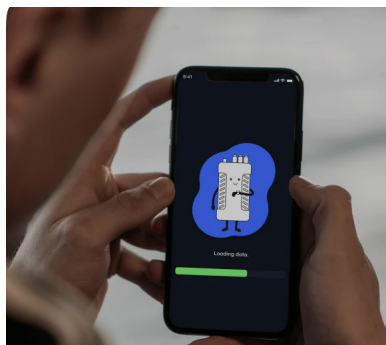


SOFT-CTXSUITE-1-CRD

PocketCodr Suite Plan Subscription		
Part Number	Price	Description
<u>SOFT-CTXSUITE-1-CRD</u>	\$195.00	PocketCodr Contrinex Suite Plan subscription card, 1 year renewal. For use with PocketCodr POC-CDR-M12.

Download the app

Install the PocketCodr app on your preferred device. Get it from the App Store and Google Play Store.



Requires iOS 13.1 or higher



Requires Android 7.0 or higher

Activate your account

Sign up for a free account and activate your subscription! We recommend a Contrinex Suite subscription plan to fully unleash the power of the PocketCodr.

Activating your subscription is easy and takes only seconds: you will be able to use an activation code found on the subscription card.

Connect your device

- Launch the app and turn on your PocketCodr device: it will immediately appear in the list of devices near you
- Connect any certified IO-Link sensor and it will be automatically detected
- Remember to log in with your PocketCodr device account in the app to link your device with your subscription
- Browse the menus and start configuring your sensor like never before!

For non-certified IO-Link sensors, such as prototypes, you will be able to provide an IODD file from your device's file system.



All Values



Library

Available with IO-Link Devices



Switch Point



Counter



Teach



Output



Alarm



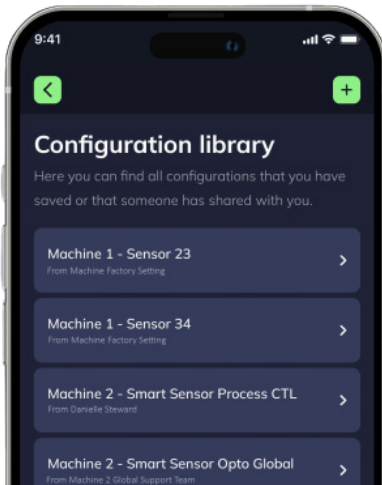
Configure
Timer

Available only with compatible Contrinex Smart Series Sensors



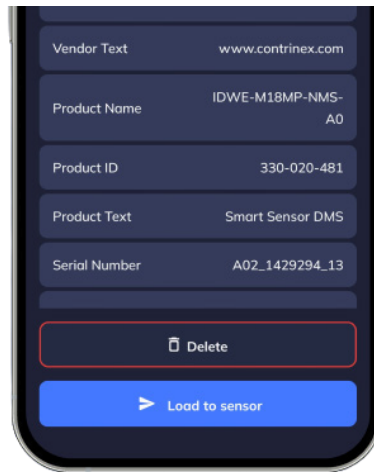
PocketCodr

PocketCodr Suite Plan Subscription



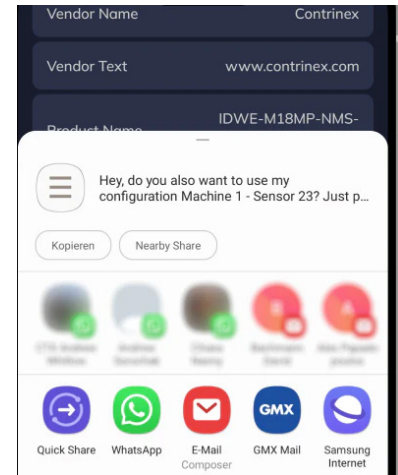
Configuration Library

Open your configuration library by tapping on the Library Action Widget on the home screen. Tap on a configuration to view its specific content.



Save your Configuration

Open your library by tapping on the Library Action Widget on the home screen. Then tap on the «+» icon to save it to the Library. Name your configuration so you can remember it again for future use, and share it with colleagues for remote use.



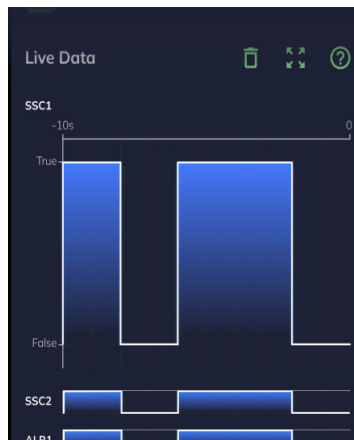
Share your Configuration

Open your library, then select the configuration you would like to share. Tap on the «Share» icon on the upper right of the screen. The PocketCodr app will show all sharing options of your phone or tablet. The recipient, who must also use the PocketCodr app, will receive a link for adding the configuration to their own Library.



Live Monitoring

View in real time the device's behavior and indicators of process data inputs. Simply tap on them to add to the Live Chart.



Live Data Chart

Enables users to visualize a device's response to complex sensing targets and sequences. Displays up to six device inputs simultaneously.



Teach

With the Teach Action Widget, you teach your smart sensor digitally using a graphical interface. Just put in position and press "Teach".