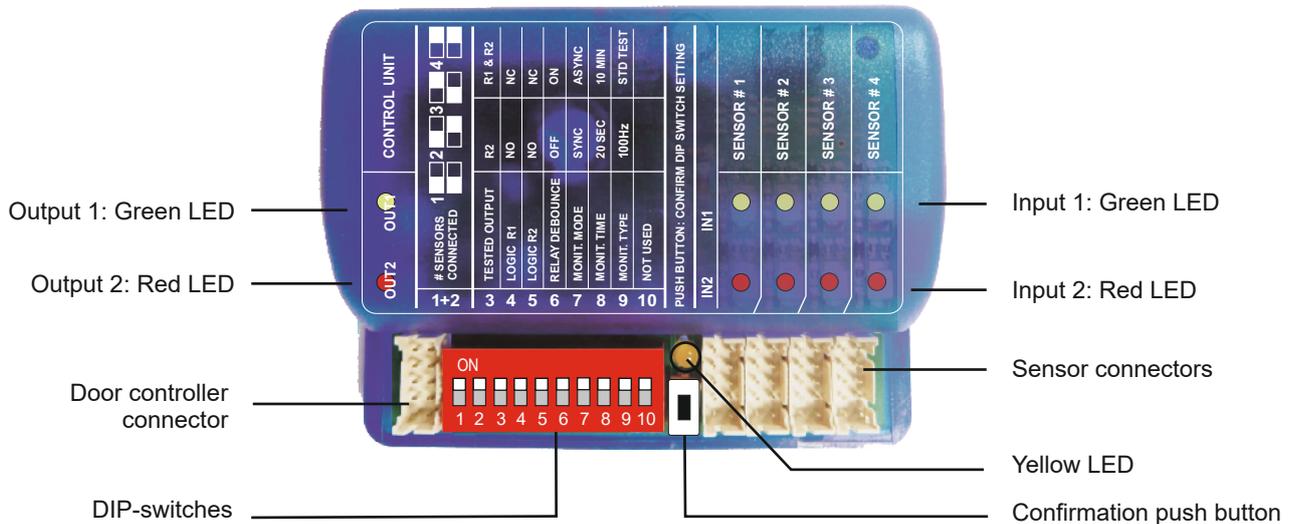


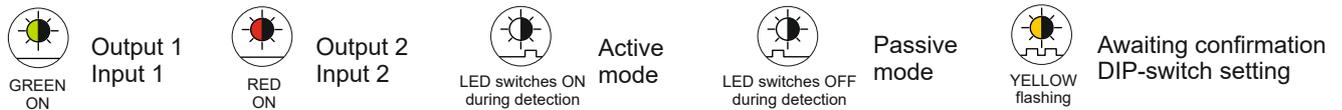
MULTI-SENSOR HUB

Hub for connecting multiple protective sensors to one automated door/window controller

DESCRIPTION



LED SIGNAL

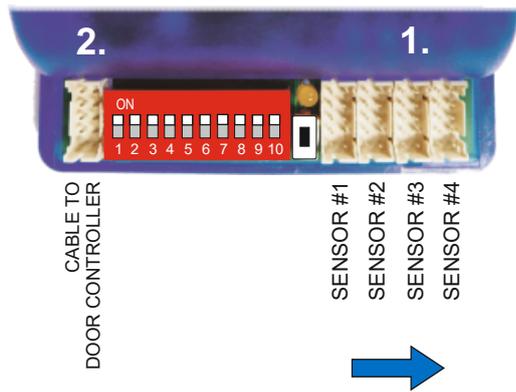


TECHNICAL SPECIFICATIONS

Max. load current:	2 A
Supply voltage:	12 V DC - 24 V DC +10% (min. 16 V DC @ max. load current)
Output to door controller:	2 galvanical isolated outputs (OPTOFET; $U_{MAX} 42 V DC$; $I_{MAX} 100 mA$) maximum output power dissipation: 200 mW off-state leakage current: 10 μA on-state maximum resistance: 20 Ohms
Monitoring input from door controller:	1 galvanical isolated input (Optocoupler; max 30 V DC (6 mA)); voltage threshold: logic high: >10 V DC (2 mA); logic low: <1 V DC
Input from each sensor:	2 non-isolated inputs
Monitoring output to each sensor:	1 non-isolated output ($U_{OUT} = U_{SUPPLY MAX}$; $I_L = 50 mA$)
Monitoring response time:	from 200 μs to 50ms (depending on sensors & hub setting)
LEDs:	red & green for status display of each connected sensor red & green for hub output status display orange for DIP-switch status change display
Applicable to :	IXIO-DT1, IXIO-ST, Flatscan SW, Flatscan W, 4Safe
Conformity:	EN ISO 13849-1 PL" c" / CAT2
Temperature range:	from -25° to +60° (for indoor use only)
Dimensions:	70 mm (L) x 55 mm (H) x 25 mm (D)
Housing material:	ABS (translucent blue)
Length of sensor cables:	2.70 m
Length of power cable:	2.60 m
Lifetime:	designed for minimum 10 years

Specifications are subject to changes without prior notice.
For more information concerning the monitoring cycle, see application note on monitoring by voltage.

WIRING



Attention! Never use the 4SAFE power cable to connect the Hub to the door controller.

1. Connect the sensors (from 1 to 4) to the sensor connectors starting from the left using the cables that have connectors on both ends.
2. Connect the cable with only one connector from the Hub to the door controller (see wiring diagram).

DIP-SWITCH SETTINGS

DIP1	Number of sensors connected to the Hub				
DIP2		1 sensor	2 sensors	3 sensors	4 sensors
DIP3	Tested Output(s)	<input type="checkbox"/> ON R1 & R2 (e.g. Flatscan SW, 4SAFE) <input type="checkbox"/> OFF R2 (e.g. IXIO, Flatscan W)	The selected test mode is applicable for all connected sensors. Do not mix sensor types.		
DIP4	Logic R1 (Output configuration)	<input type="checkbox"/> ON NC <input type="checkbox"/> OFF NO	Check the output logic on the connected sensors. The output logic has to be the same on the Hub and on all connected sensors (see LED-signal).		
DIP5	Logic R2 (Output configuration)	<input type="checkbox"/> ON NC <input type="checkbox"/> OFF NO	Check the output logic on the connected sensors. The output logic has to be the same on the Hub and on all connected sensors (see LED-signal).		
DIP6	Relay debounce avoids the bouncing of the relay contact during a monitoring request	<input type="checkbox"/> ON ON <input type="checkbox"/> OFF OFF	Recommended when the monitoring input is connected to a relay output on the door controller. Set to OFF for a faster response time.		
DIP7	Monitoring mode The monitoring has to be active on all connected sensors!	<input type="checkbox"/> ON Asynchronous <input type="checkbox"/> OFF Synchronous	<p>The Hub sends a monitoring request to all connected sensors every x seconds (according to DIP 8 setting), independent of the door controller. When the door controller sends a monitoring request to the Hub, it answers immediately giving the result of the last monitoring cycle.</p> <p>The Hub sends a monitoring request to all connected sensors only when the door controller sends a monitoring request to the Hub. The response time on monitoring request is dependent on response time of the connected sensors.</p>		
DIP8	Monitoring cycle time in asynchronous mode	<input type="checkbox"/> ON 10 min <input type="checkbox"/> OFF 20 sec	<p>The Hub sends a monitoring request to all connected sensors every 10 minutes (only in asynchronous mode).</p> <p>The Hub sends a monitoring request to all connected sensors every 20 seconds (only in asynchronous mode).</p>		
DIP9	Monitoring type	<input type="checkbox"/> ON Standard voltage monitoring <input type="checkbox"/> OFF Signal output 100 Hz	<p>Most frequently used type of monitoring using test input.</p> <p>Only if your door controller is compatible with this type of monitoring.</p>		

DIP10 Not used



After changing one or more DIP-switch settings, the yellow LED flashes. Confirm the new setting(s) by pushing the push button until the LED switches off. The setting is confirmed.