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IDENTIFICATION SYSTEMS

R/W head

EIR 100

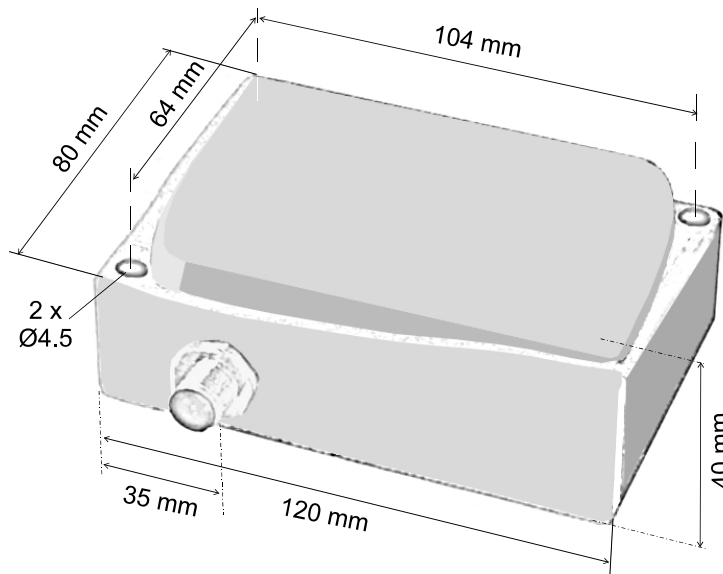
GENERAL FEATURES

The EIR 100 is an **infrared** transceiver (R/W head).
 Used in conjunction with an appropriate (suffix: R) Balogh control board, it allows to read /write data to/from OIB/OIR electronic tags provided the line of sight is clear.



ASSEMBLY DATA

Assembly using two screws (length under head \geq 35 mm, right-angled distances: 104 x 65 mm):



Connection:

The EIR 100 is fitted with a 4-pin A-coded M12 male metallic socket.

Use an assorted cable connector (ref. 202 274) and a cable with Twin Shielded and Twin Twisted pairs, with or without an overall foil/braid shield, complying with the following:

- Max. length: 50 m.
- Overall max. capacity between leads and shield: 14 nF.
- Input and Output leads must be apart.
- The shield of both pairs must be connected to the 0V voltage.
- The optional overall shield must be connected to the cable connector metal housing by a 360° round crimping.

Keying at 10:00 allows you to plug some right-angled cable connectors (check to make sure that yours are OK):



Pin nr	Description
1	+24VDC
2	Output
3	Input
4	0 V

C
H
A
R
A
C
T
E
R
I
S
T
I
C
S

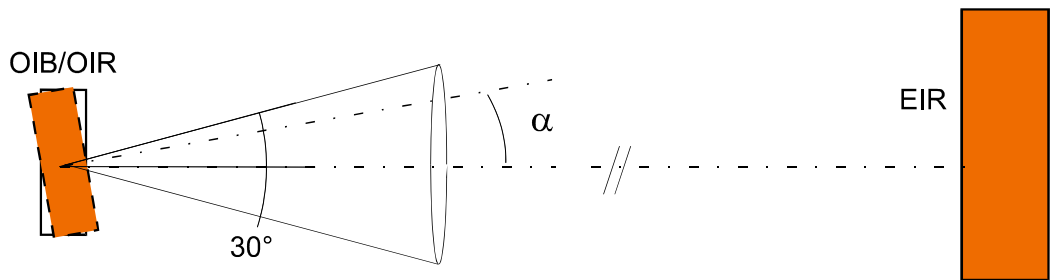
A
S
S
E
M
B
L
Y
R
E
C
O
M
M
E
N
D
A
T
I
O
N
S

		Parameters	MIN	NOM	MAX	Units
Transmiss	S	Range	50		2,000	mm
	S _r	Recommended range		1,200		mm
	DS _r	Diameter of the transmission zone @ S _r	600			mm
Power	U _{cc}	Supply direct voltage (ripple included)	21	24	29	V
		Protection against polarity reversal		yes		-
	I _{cc}	Current drain @24VDC			50	mA
General	T _A	Ambient temperature	- 25		+70	°C
		Protection rating		IP 60		-
		Weight		160		g
		Casing		PA 12 (GF30%)		-

Test conditions for transmission characteristics:

- the transmission panes must be clean,
- for DS_r to reach at least the published value, the tilt α must not exceed 15°:

The line perpendicular to the tag main side must be kept inside the 30°-angled cone the axis of which is perpendicular to the EIR main side (best position: $\alpha = 0^\circ$):

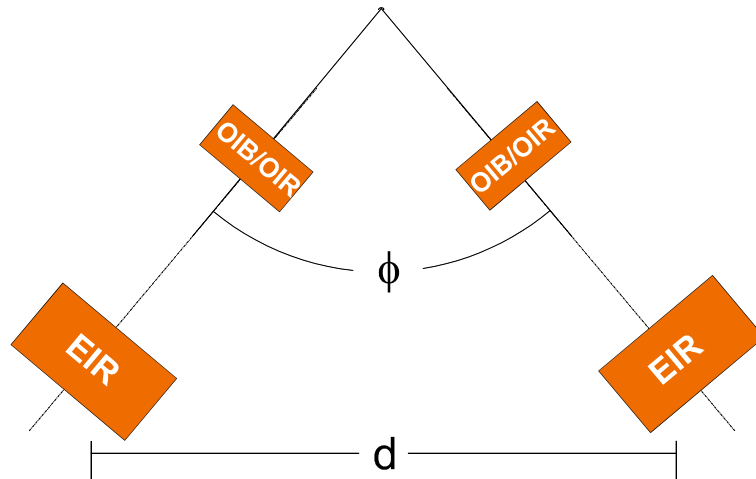


To prevent a tag from being seen by a neighbouring station:

- the distance between two EIRs must exceed $d = 2,000$ mm,

AND

- the angle ϕ of the two lines of sight must **not** exceed 100°:



AN 021010