



Junction Box Receiver for Incremental Encoders

- Fiber Optic Transmission up to 2000 meters
- No Degradation of Encoder Signal from Electrical Disturbances
- High Encoder Frequency and Low Transmission Delay
- Added Safety by use of two Redundant Fibers
- Compatible with all Scancon Fiber Optic Transmitters for Incremental Encoders
- DIN Rail Mounting

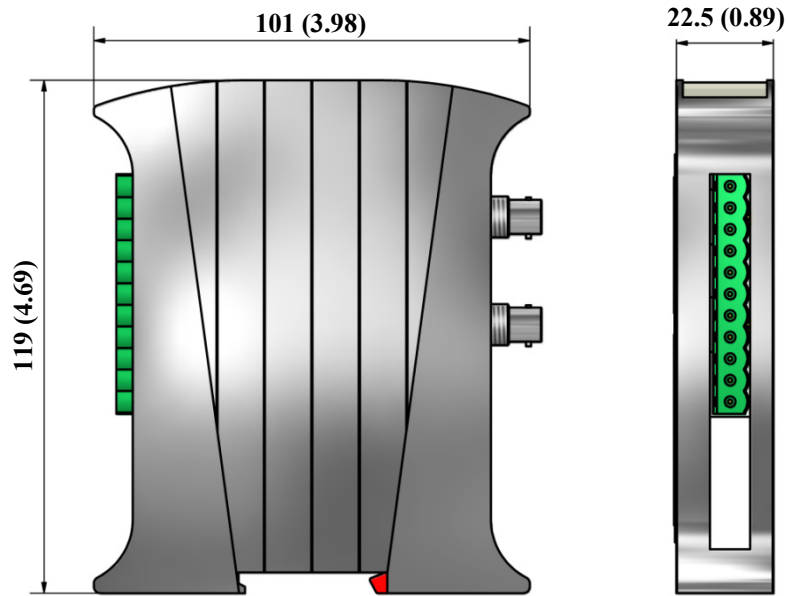
Electrical Specifications	
Supply Voltage	4.75V to 30V
Current Consumption (typical)	290 mA @ $V_{sup} = 5V$ 110 mA @ $V_{sup} = 15V$ 70 mA @ $V_{sup} = 30V$
Encoder Outputs	Differential outputs $V_{high} \geq V_{sup} - 1.2V$ @ $I_{out} = -25mA$ $V_{low} \leq 0.8V$ @ $I_{out} = 25mA$
Status Output	$V_{high} \geq V_{sup} - 1.2V$ @ $I_{out} = -25mA$ $V_{low} \leq 0.8V$ @ $I_{out} = 25mA$
Show Status Input	$V_{high} \geq 2/3 V_{sup}$ $V_{low} \leq 1.5V$ Maximum input voltage equal to Supply voltage

Common Specifications with Transmitter	
Update Rate	1.04 million updates / second ~ 0.96 $\mu sec.$ / update
Transmission Delay	$\leq 3 \mu sec.$ Approx. 1 $\mu sec.$ must be added per 200 meters of fiber optic cable
Optical Fiber Connectors	Standard ST Insertion loss $\leq 0.7 dB$ ($\leq 0.4 dB$ recommended)
Recommended Optical Fiber	62.5 / 125 μm , multimode (TUG 651)
Optical Wavelength	850 nm
Transmission Distance	1,000 meters 2,000 meters (option)

Mechanical Specifications	
Material	Box: UL94-V0 self extinguishing ABS Color: Anthracite Front and cover plates: Stainless steel
Weight	Approx. 150 gr. (5.3 oz) including terminal block connector
Dimensions	Approx. 101 x 119 x 22.5 mm (3.98 x 4.69 x 0.89 inches)
Mounting	DIN Rail Mounting in accordance with EN-50022 for 35mm. rails

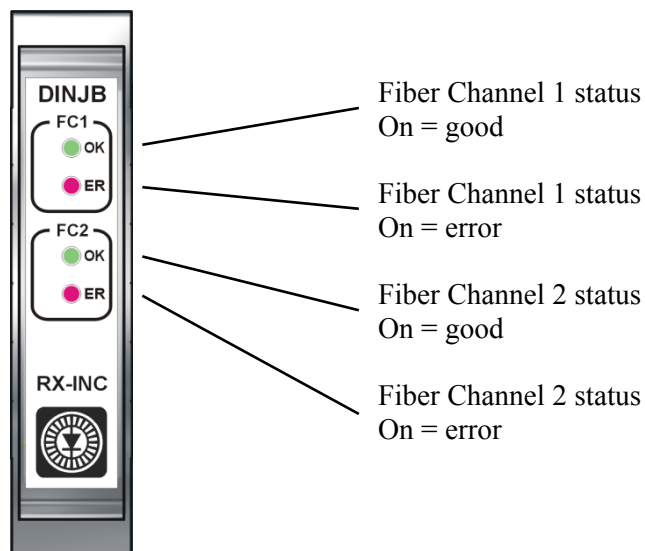
Environmental Specifications	
Operating Temperature	-20° to +70° C
Storage Temperature	-40° to +85° C
Humidity	98 % RH without condensation
Shock	100 G / 11 ms
Vibration	(10-2000 Hz) / 10 G
Bump	10 G - 16 ms (1000 x 3 axis)
Enclosure Rating	IP 40
Electromagnetic Compatibility (EMC)	EN 61000-6-2 : 2005 (industrial environments) EN 61000-6-3 : 2007 (residential, commercial, and light-industrial environments)

Mechanical Dimensions

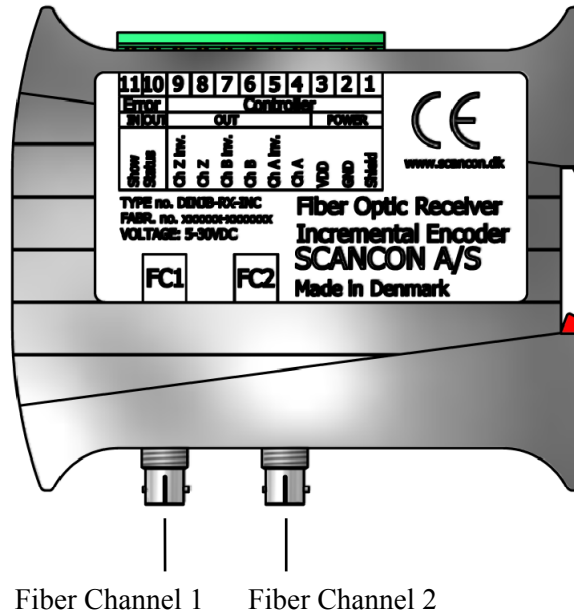


Dimensions in mm (inches)

Front Panel Indicators



Connection



Terminal	Name	Type	Description
1	Shield	Shield	Cable shield
2	GND	Supply input	0V (GND) for Receiver
3	VDD	Supply input	Positive supply for Receiver
4	Ch A	Output	Channel A out
5	Ch A Inv.	Output	Channel A inverted out
6	Ch B	Output	Channel B out
7	Ch B Inv.	Output	Channel B inverted out
8	Ch Z	Output	Channel Z out
9	Ch Z Inv.	Output	Channel Z inverted out
10	Status	Output	High for both Fiber Channels good Low if either Fiber Channel is malfunctioning
11	Show	Input	Not used

Ordering Code

DINJB – RX – INC