



Junction Box Transmitter 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 Receivers for Incremental Encoders
- DIN Rail Mounting

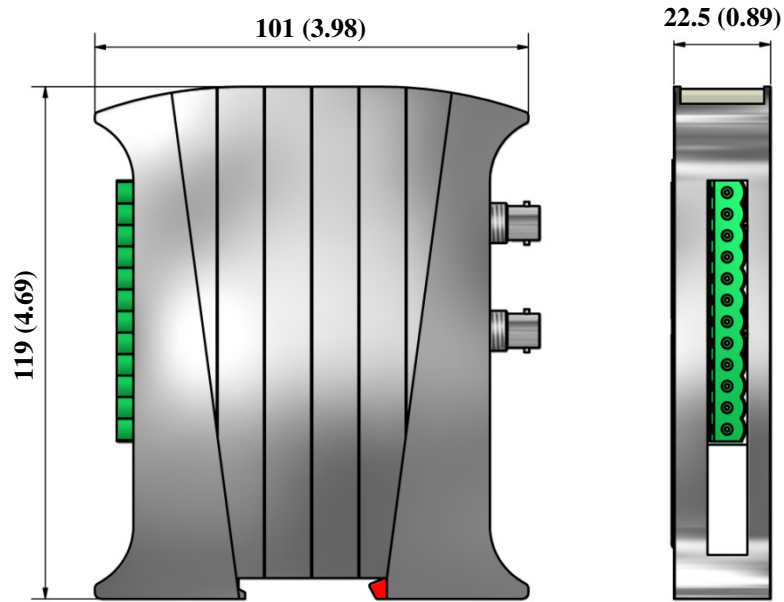
Electrical Specifications	
Supply Voltage	4.75V to 30V
Current Consumption (typical)	250 mA @ $V_{sup} = 5V$ (excl. encoder) 110 mA @ $V_{sup} = 15V$ (excl. encoder) 70 mA @ $V_{sup} = 30V$ (excl. encoder)
Encoder Inputs	Differential inputs $V_{high} \geq 2/3 V_{sup}$ $V_{low} \leq 1/3 V_{sup}$ Maximum input voltage equal to Supply voltage
Encoder Frequency	Max. 100 kHz
Encoder Supply Voltage	Identical to Transmitter Supply voltage

Common Specifications with Receiver	
Update Rate	1.04 million updates / second ~ 0.96 μ sec. / update
Transmission Delay	$\leq 3 \mu$ sec. Approx. 1 μ sec. must be added per 200 meters of fiber optic cable
Optical Fiber Connectors	Standard ST Insertion loss ≤ 0.7 dB (≤ 0.4 dB recommended)
Recommended Optical Fiber	62.5 / 125 μ m, 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

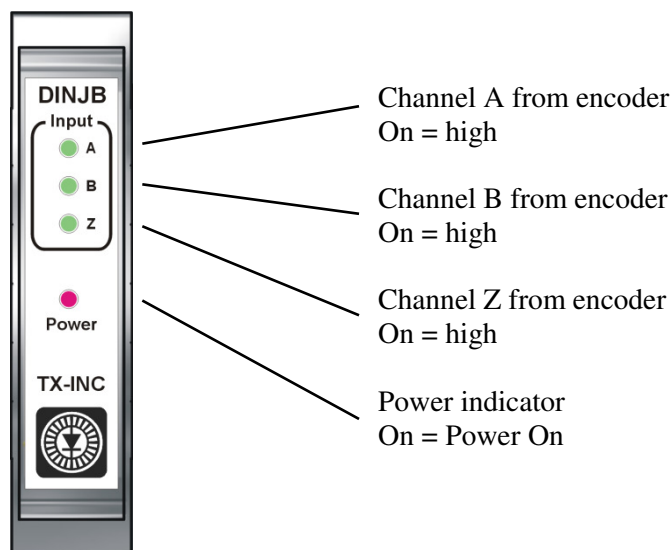
Environmental Specifications	
Operating Temperature	-20° to +70° C
Storage Temperature	-40° to +85° C
Humidity	98 % RH without condensation
Shock	100 G / 11 ms
Vibration	(10-2000 Hz) / 10 G
Bump	10 G - 16 ms (1000 x 3 axis)
Enclosure Rating	IP 40
Electromagnetic Compatibility (EMC)	EN 61000-6-2 : 2005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

Mechanical Dimensions

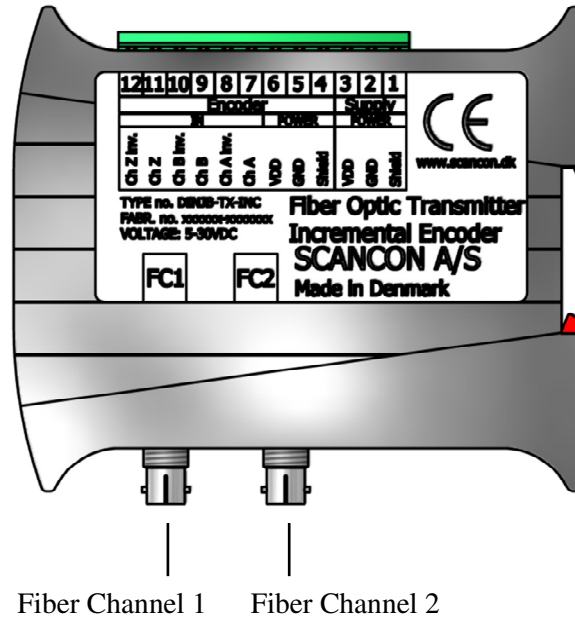


Dimensions in mm (inches)

Front Panel Indicators



Connection



Terminal	Name	Type	Description
1	Shield	Shield	Cable shield
2	GND	Supply input	0V (GND) for Transmitter
3	VDD	Supply input	Positive supply for Transmitter
4	Shield	Shield	Cable shield for Encoder
5	GND	Supply output	0V (GND) for Encoder
6	VDD	Supply output	Positive supply for Encoder
7	Ch A	Input	Channel A in
8	Ch A Inv.	Input	Channel A inverted in
9	Ch B	Input	Channel B in
10	Ch B Inv.	Input	Channel B inverted in
11	Ch Z	Input	Channel Z in
12	Ch Z Inv.	Input	Channel Z inverted in

Ordering Code

DINJB -TX - INC