### 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 µsec / update
- **Transmission Delay**: ≤ 3 µsec, Approx. 1 µsec. 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 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)

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### 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
Mechanical Dimensions

Dimensions in mm (inches)

Front Panel Indicators

Channel A from encoder
On = high

Channel B from encoder
On = high

Channel Z from encoder
On = high

Power indicator
On = Power On
## Connection

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

### Ordering Code

**DINJB –TX – INC**