### APPLICATIONS

- Contactless sensor
- High accuracy closed loop control
- High accuracy displacement monitoring

### KEY FEATURES

- Output: ±10 V voltage
- Eddy current sensing technology
- Typical linearity 0.1% of full scale
- Low temperature drift coefficient
- 20 kHz bandwidth
- Up to 3 channels on a single board
- Fully compatible with CTEC Eddy Current Probes and Powered Racks

### RELATED PRODUCT

- CTEC Eddy current Probes (ECP)
- CTEC Powered Racks

### SPECIFICATIONS

#### Preliminary data

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>TYPICAL VALUE</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of channels</td>
<td>1 ... 3</td>
<td></td>
</tr>
</tbody>
</table>

#### Input

- Sensor type: CTEC Eddy Current Probes

#### Electrical characteristics

- Excitation frequency: > 500 kHz

#### Output

- Typical output voltage \( ^{(1)} \): ±10 V
- Output peak current: ±50 mA
- Output impedance: 100 Ω
- DC offset span: ±10 V
- Minimum output load: 600 Ω
- Bandwidth - 3 dB (extended on request): 20 kHz

#### Typical achieved accuracy

- Resolution (BW = 20 kHz) \( ^{(2)} \): 0.010 % FS
- Resolution (BW = 1 kHz): 0.003 % FS
- Resolution (BW = 20 kHz), extended range: 0.014 % FS
- Resolution (BW = 1 kHz), extended range: 0.005 % FS
- Linearity \( ^{(3)} \): 0.1 % FS
- Thermal drift \( ^{(5)} \): <0.05 % FS/°C
ANNOTATIONS

(1) Set to [ -1 V ; 7.5 V ] on CTEC systems to be consistent with driver input - Could be adjusted with customer specification
(2) BW : Bandwidth
(3) FS : Full Scale
(4) Better linearity can be achieved on request
(5) Due to temperature change on the probe

MISCELLANEOUS

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>TYPICAL VALUE</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass</td>
<td>0.18</td>
<td>kg</td>
</tr>
<tr>
<td>Front face dimensions</td>
<td>6 F wide, 3 U high</td>
<td></td>
</tr>
<tr>
<td>Form factor</td>
<td>Fully compatible with CTEC powered rack</td>
<td></td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>0 ... 40</td>
<td>°C</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>-10 ... 50</td>
<td>°C</td>
</tr>
</tbody>
</table>

INTERFACES

- Output connector: BNC type
- Input sensor connector: LEMO EGG.00.304.CLL
- DC Offset: 10-turn screw potentiometer
- Synchronisation for multi probes/conditioners: SMC 50 Ohms type
- Indicators: Front panel leds for range indication

OPTIONS

- Differential output (with two probes)
DRAWING

TYPICAL PERFORMANCE CHARACTERISTICS

![Graphs showing typical performance characteristics](image-url)