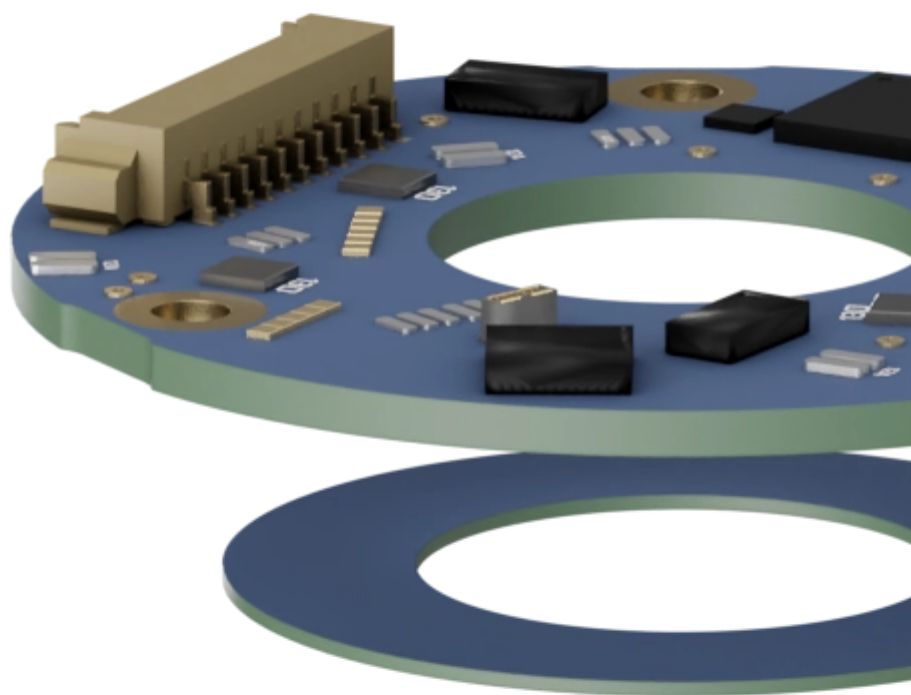


variables/V-color

# **Encoder | INDUCTIVE Rotary | IND-ROT-045-A21-FR**







## System Data

### IND-ROT-045-A21-FR

<b>Type</b>	Axial, frameless, true absolute INDUCTIVE encoder
<b>Standard Resolution</b>	19 bits, 131'072ppr 524'288cpr
<b>ENOB in entire mounting tolerance range</b>	18 bits
<b>High Accuracy</b>	$\pm 0.025^\circ$ , $\pm 450\mu\text{rad}$
<b>Standard Accuracy</b>	$\pm 0.040^\circ$ , $\pm 700\mu\text{rad}$
<b>Thickness</b>	7.80
<b>Hysteresis</b>	none
<b>Repeatability</b>	1 resolution count
<b>Position update rate and signal latency</b>	Real-time
<b>Power-up Time</b>	max. 0.8 sec



## Electrical Data

**Supply voltage** OptionAV:min.4.35Vdc.max.36Vdc

<b>Reverse polarity protection</b>	yes
<b>Current Consumption</b>	max.100mA@ 5Vdc, max. 30mA@24Vdc



## Mechanical Data

**Stator Base Material** FR4 (PCB)

**Stator Weight** 5.50 g

**Rotor Base Material** Carrier : anodized aluminum Bonded scale: FR4

**Rotor Weight** 5.50 g

**Vibration** EN 60068-2-6, 20 g, 55 .. 2000 Hz

**Shock** EN 60068-2-27, 200 g, 6 ms



## Mounting Tolerances

**Nominal Axial (air-gap)** 0.50 mm

**Axial Tolerance** 0.30 mm (0.20 mm to 0.80 mm)

**Radial Tolerances** 0.30 mm



## Environmental Data

**Temperature Range - Standard Operating** -20°C .. +85°C

**Temperature Range - Standard Storage** -20°C .. +85°C

**Temperature Range - Extended Operating** -40°C .. +105°C

**Temperature Range - Extended Storage** -55°C .. +125°C

**Ingress Protection**

IP00

**EMC Immunity**

complies with EN IEC 61000-6-2

**EMC Emission**

complies with EN IEC 61000-6-4



**Advantages**



**Benefits**

- Plug-n-play
- No field calibration required
- Wide mounting tolerances
- High accuracy
- Low installation cost
- Low integration effort
- Easy installation



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