

TCEC100

Tilt Compensated Electronic Compass Preliminary Specifications

Sentera Technology Corporation

Sentera Technology's TCEC100 tilt compensated electronic compass measures static pitch, roll and heading angles. The TCEC100 package includes calibration algorithms to compensate for hard and soft-iron effects of the mounting platform.

Specification		Remarks	
• Range: Roll, Pitch	(°)	-50 to +50	Full range version available
• Range: Heading	(°)	0 to 360	
• Accuracy: Roll, Pitch	(°)	< 1.0	Typical for full temperature range
• Accuracy: Heading	(°)	< 2.0	
• Resolution	(°)	< 0.2	
• Bandwidth	(Hz)	10	
Environment			
• Operating Temperature	(°C)	0 to 70	Extended temperature version available
• Non-Operating Shock	(g)	50,000	0.5 ms
Electrical			
• Supply Voltage	(V)	5	
• Current Consumption	(mA)	20	
• Digital Output Format		I ² C	RS-232 version available
Dimensions		1.5" x 1.5" x 0.3"	

Notes:

- 1) Onboard processor implements an IIR filter that removes magnetic noise caused by household appliances and alternating current sources.