

iTES-PDT-07

Small Size Single Axes Precision Turntable with 0.7 Nm Torque

iMAR manufactures gyroscopes and inertial measuring systems in all classes of performance. Beside of our sensor and navigation products we also provide gyro test equipment.

With the iTES-PDT07 iMAR provides a high precision single axis angular rate system for testing of gyroscopes and smaller IMUs (e.g. MEMS based IMUs) under laboratory conditions.

iTES-PDT07 comes with a RS232 interface, which is used to control the turntable. Commands are



available like “constant rate”, “angular step”, “absolute angular position” or “adjust angular acceleration”. Furthermore a CAN interface is available to monitor the motion in realtime. The system is powered by 24...48 V DC (option: 14...34 V). For multi axes IMU testing or for operating heavy loads please refer to our testing systems iTES-14, iTES-19, iTES-24, iTES-29 and iTES-39, which can be delivered with or without an additional temperature controlled chamber.

Technical Data of iTES-PDT-07-SV [-A]:

Mounting Area / Table Top:	Diameter d=200 mm
Mounting Threads on Mounting Platen:	M6, all 25 x 25 mm ² Number of threads: 45
Table Drive:	Brushless Direct Drive System with high-res angular incremental encoder
Torque:	T _n 0.7 Nm T _{max} 3.0 Nm
Rate:	250 min ⁻¹ (1500 deg/s); [option -A: 120 min ⁻¹]
Inertia of Table Top:	I = 4,33 10 ⁻³ kgm ²
Angular Resolution:	5.5 arcsec [option -A: 0.55 arcsec]
Number of Slip Rings / Current:	24 slip rings, each 2 A (SubD25 connector)
Interfaces:	RS232 (57.6 kBd) for command, CAN (500 kBd)
Size and Weight / max. Payload:	D = 250 mm, H = 160 mm approx. 5.6 kg / max. payload 4 kg
Power Supply:	24...48 V DC; [option -LV: 14...34 V DC], max 150 W

Please do not hesitate to contact us for further information.

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