maturo GmbH
Am Kalvarienberg 24 • 92536 Pfreimd • Germany

4 Axis DUT Positioner APTL-50kg

Technical data:

Load capability Distance center of gravity of DUT to mounting flange	max. 50 kg max. 150 mm
Rotating angle azimuth (x-axis) electrically	+/- 90°
Speed azimuth adjustable	0.5°/s – 18°/s
Rotating angle polarization (y-axis) electrically	+/- 60°
Speed polarization adjustable	0.5°/s – 30°/s
Polarization axis height above floor	1.5 m
Tilting angle (z-axis) electrically	-45 ° (down) to + 60° (up)
Speed tilting adjustable	0.5°/s – 18°/s
Positioning accuracy in each axis	+/- 0.05°
Linear movement range manually (manually lockable)	500 mm
Positioning accuracy linear	+/- 1 mm (indicated by scale)
Overall dimensions (L x W x H) in m	approx. 1.9 x 1.0 x 1.7
Motors	Synchronous servo motors
Drives	High accurate gears
Voltage	380 VAC – 480 VAC, 50 Hz / 60 Hz three phases
Current consumption	max. 16 A
Required RCD	300 mA
Control cable	Fiber optic lines
Remote control via	LAN (TCP/IP); (IEEE only with NCD)
Interference suppression	20 dB under limits DIN EN 55011:2018-05 class B
Operating temperature	10° C – 35 ° C
Total weight	approx. 1400 kg
Accessories	Wooden plates for absorber mounting Absorbers for covering Mounting plate for antennas Power supply cable Service manual

Other specifications available upon on request

Phone: +49 (0)9606 923913-0
Fax: +49 (0)9606 923913-29
eMail: info@maturo-gmbh.de
Web: www.maturo-gmbh.de

Properties of the APTL

- Azimuth, polarization, tilt and linear positioner
- Spherical Great-Circle Cut system
- High accurate antenna measurement capabilities for both, near-field and far-field data acquisition
- 5G NR FR1 / FR2 OTA testing capabilities
- Accuracy enough for a frequency coverage up to 90 GHz
- Ideal for Antenna-Under-Test (AUT) like satellite dishes or massive MIMO base station-antennas
- Independent rotations of all motion axis
- Variable speed adjustments at all axis
- Readout by high accurate encoders
- Integrated rotary joint for EUT and antennas available upon request
- Easy installation and implementation in existing chambers

The LAN (TCP/IP) - interface provides an additional control option for all functions, when operated with the FCU$^{3.0}$ or NCD Controller