



VTIU TAB05.SLIM turntable in the EMC testing laboratory



Control unit with angle display

ULTRA-SLIM TURNTABLE FOR EMC TESTING

The VTIU TAB05.SLIM turntable is a high-precision, ultra-slim, and cost-effective solution for device positioning during EMC and antenna measurements. Developed by the engineers at Scientific and Technical Center (STC) "PRIBOR", it combines a minimal profile height of just 80 mm with a modular structure and dielectric galvanic decoupling of electronics from the worktable disk, making it the ideal choice for anechoic, semi-anechoic chambers, and GTEM cells.

80 mm
PROFILE HEIGHT

50 kg
MAX LOAD

±0.5°
ACCURACY

Wi-Fi/RS232
CONTROL

KEY ADVANTAGES

Ultra-Low Profile — 80 mm

Ultra-slim profile that easily installs into the floor of a shielded enclosure (internal space 600×600 mm). With a 50 mm panel thickness, it protrudes in height by only 2 cm.

600×600 mm Size, Load up to 50 kg

Compact form factor for typical measurement volumes, small chambers, and lightweight items under test.

Dielectrically Decoupled Electronics

Shielding is at the disk level; external electronics have no galvanic connection to the work surface. Ideal for GTEM cells without expensive optical filters.

Direct Wi-Fi Control

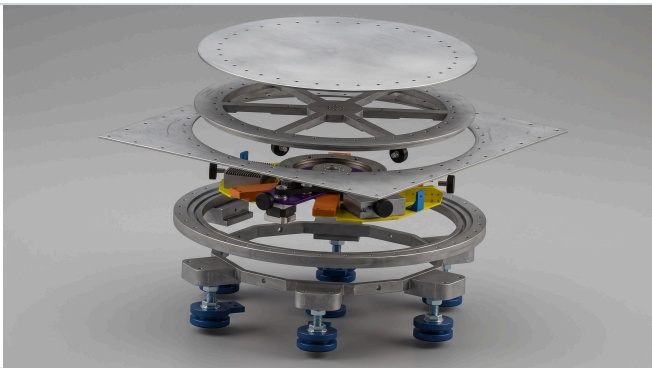
Direct wireless management without external fiber-optic cables, reducing setup costs and line feedthroughs.

Power Supply Flexibility

Operates from a 24 V DC battery accumulator up to standard 220 V AC electrical power supply.

Control Interfaces

TTL, RS232, USB, Wi-Fi. Seamlessly integrates into automated test systems.



MECHANICAL STRUCTURE AND INTERNAL GALVANIC DECOUPLING

ADDITIONAL TECHNICAL FEATURES

- **Adjustable Motion Profile:** Programmable start, cruising speed, and stop settings. Minimum step of 1°; supports any sequence via move <angle> command.
- **Full 0...360° Rotation:** Software-limited angle range to protect mechanics and prevent cable twisting. Absolute angle control.
- **Work Surface Matches Chamber Lining:** Disk material analogous to that used in anechoic chamber shielding for homogeneous electromagnetic performance.
- **High Positioning Accuracy (±0.5°):** 1:10 gear reducer and field-tested mechanics for maximum measurement repeatability.
- **Minimal Electromagnetic Interference:** Shielded enclosure and decoupling prevent distortion in sensitive measurements.

FIELDS OF APPLICATION

- EMC testing according to CISPR, IEC, and other standards
- Measurements in GTEM cells as a floor extension module
- Antenna radiation pattern measurements in anechoic chambers
- Integration into 600×600 mm shielded enclosures
- Automated production testing of electronic equipment
- R&D laboratory tasks requiring precision positioning

VTIU TAB05.SLIM TECHNICAL SPECIFICATIONS

Characteristic	Value
Turntable Height	80 mm
Block Dimensions	600 × 600 mm
Permissible Load	Up to 50 kg
Installation Type	Recessed into chamber floor / Stand-alone unit
Rotation Angle	0° to 360° (software limited)
Positioning Accuracy	±0.5°
Minimum Step	1°
Rotation Speed	5 s to 1 min per full rotation (adjustable)
Motion Profile	Programmable start, cruising speed, and stop
Programming	Any sequence via move <angle> command
Work Surface Material	Analogous to anechoic chamber shielding
Galvanic Decoupling	Present (dielectric decoupling between electronics & disk)
Power Supply	DC 24 V (battery) ... AC 220 V (customer's choice)
Control Interfaces	TTL, RS232, USB, Wi-Fi
Control Modes	PC, Web application (Wi-Fi), external controller
Shielding	Shielded enclosure, decoupling at disk level