

## Tilt Antenna Mast TAM 4.0-P

### Technical Data

|                                                                                |                                                                           |
|--------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Antenna height automatic adjustable from                                       | 1.0 to 4.0 m                                                              |
| Total mast height                                                              | 4.5 m                                                                     |
| Load capability                                                                | max. 10 kg (when balanced)                                                |
| For long and heavy antennas a counter weight is required to balancing the load |                                                                           |
| Depending on the distance of the antenna centre of gravity                     |                                                                           |
| Material of antenna mast                                                       | Plastic + reinforced fibreglass<br>weatherproof                           |
| Mast cross-section                                                             | 100 mm x 100 mm (2 fibreglass tubes)                                      |
| Base L x W                                                                     | 1.0 m x 0.7 m                                                             |
| Positioning speed adjustable between                                           | 2.0 to 20 cm/sec.                                                         |
| Positioning accuracy                                                           | ± 0.5 cm                                                                  |
| Pneumatic Polarisation                                                         | 0°/90° (vert./hor.)                                                       |
| Positioning time                                                               | approx. 3 sec.                                                            |
| Polarisation drive                                                             | Pneumatic rotary actuator                                                 |
| Control                                                                        | Solenoid valve                                                            |
| Pressure                                                                       | max. 6 bar                                                                |
| Tilt angle automatically adjusted during scan                                  | 0° to 45° (depending on distance of EUT)                                  |
| Tilt speed adjustable between                                                  | 1° to 7.5 °/sec.                                                          |
| Tilt accuracy                                                                  | ± 0.5°                                                                    |
| Motors                                                                         | Brushless stepper motors 200 W                                            |
| Interference suppression:                                                      | 20 dB under limits EN 55022 class B                                       |
| Current consumption                                                            | max. 5A                                                                   |
| Voltage                                                                        | 100-240 VAC, 50/60 Hz, single phase                                       |
| Discharge current                                                              | 25mA per drive unit<br>(higher in the moment when powering on)            |
| Control cable                                                                  | Fibre optic lines                                                         |
| Remote control via                                                             | IEEE interface (optional Ethernet)                                        |
| Antenna support drive                                                          | 3 toothed belts                                                           |
| Material of toothed belts                                                      | Kevlar reinforced (non-metallic)                                          |
| Temperature range                                                              | +10 °C...+35 °C                                                           |
| Total weight                                                                   | approx. 150 kg                                                            |
| Accessories                                                                    | Interface to NCD Controller<br>1.5 m power supply cable<br>Service manual |

Information presented enclosed is subject to change as product enhancements are made regularly.  
Pictures included are for illustration purposes only and do not represent all possible configurations.

## Tilt Antenna Mast TAM 4.0-P



### Brief description

The Tilt Antenna Mast **TAM 4.0-P** is suitable in magnetic absorption chambers. The antenna mast, with the exception of the drive unit, is fabricated from plastic (PVC and reinforced fibreglass). The TAM 4.0-P has additionally an electrical tilt function from 0° to 45°, which automatically tilts during height scan. The tilting angle can be adjusted easily in accordance with the distance of the antenna to the EUT.

Metal parts are located only in the base plate and the drive mechanism (max. 0.3 m above ground level).

Antenna Adapters for all commercially available antennas are available upon request.

All antennas during polarisation rotate around their axis to eliminate any elevation errors.

The **IEEE 488.2 (GPIB) bus** provides an additional control option for all functions, when operated with the **NCD Controller**.