- **Frequency range from 12-1400 MHz**

- **Tilted outputs compensate for coaxial drop cable loss**

- **Combines optimal flatness to the cable with equal return path attenuation**

- **No passive intermodulation**

- **Microstrip coupling for high port to port isolation**

- **Port spacing 22 mm with DC blocked**

- **Brass connectors with tin nickel plating**

- **EMC Class A**

- **IEC M14 input connector for most reliable connection to the amplifier**

## Overview

The TMT-1400-IEC has been developed based on microstrip technology. This type of multitap combines flat frequency responses at the subscriber's wall outlet with equal return path attenuation at each port.

The typical frequency characteristic of the TMT-1400-IEC, IE: the higher the frequency the lower the tap loss, is the opposite of that of the coaxial drop cable. Therefore this 1.4 GHz tilted multitap compensates for the coaxial drop cable losses, resulting in a very good flatness (in combination with an untilted distribution amplifier). Due to the innovative design of this product utilising microstrip couplers there is no passive intermodulation.

The return path attenuation of the TMT-1400-IEC offers equal values for all ports. This is very important as conventional multitaps have different losses so return path levels differ depending on tap value.

The TMT-1400-IEC has a cast aluminium housing with a special passivation layer and high quality paint coating to protect against corrosion. The backplate is also made of cast aluminium and is sealed to protect against moisture ingress.

The connectors are made of brass - to prevent cold flow - with a tin nickel plating to prevent CPD and are spaced 22 mm apart for optimum usability.

The TMT-1400-IEC can be mounted with front or down facing ports to give the most flexible installation.

**IN**

technet**i**x

| | |
|---|---|
| 1 | 12 |
| 7.2 dB | 19.7 dB |

**TMT-1400-IEC**
Tilted multitap
12 - 1400 MHz

| | |
|---|---|
| 2 | 11 |
| 9.2 dB | 18.5 dB |

Tap values
at 1218 MHz

| | |
|---|---|
| 3 | 10 |
| 10.4 dB | 17.4 dB |

| | |
|---|---|
| 4 | 9 |
| 11.4 dB | 16.6 dB |

| | |
|---|---|
| 5 | 8 |
| 12.3 dB | 15.8 dB |

CE

| | |
|---|---|
| 6 | 7 |
| 13.3 dB | 14.5 dB |

## Electrical specifications

| | MHz | Tap 1 | Tap 2 | Tap 3 | Tap 4 | Tap 5 | Tap 6 | Tap 7 | Tap 8 | Tap 9 | Tap 10 | Tap 11 | Tap 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Insertion loss (dB, typ) (±1.0 dB tap loss tolerance) | 12 | 22.5 | 22.5 | 22.5 | 22.5 | 22.6 | 22.6 | 22.8 | 22.8 | 22.9 | 23.6 | 23.6 | 23.8 |
| | 85 | 22.5 | 22.5 | 22.5 | 22.5 | 22.6 | 23.0 | 23.3 | 23.3 | 23.3 | 23.9 | 23.9 | 24.0 |
| | 200 | 19.5 | 20.0 | 20.5 | 21.2 | 21.2 | 22.4 | 22.6 | 22.6 | 22.6 | 23.9 | 23.9 | 23.9 |
| | 470 | 14.0 | 14.7 | 15.4 | 16.5 | 17.0 | 18.4 | 18.8 | 18.9 | 19.4 | 20.0 | 20.5 | 20.7 |
| | 1006 | 7.9 | 9.2 | 10.5 | 11.7 | 12.6 | 14.1 | 14.6 | 15.6 | 16.5 | 17.5 | 18.2 | 19.4 |
| | 1218 | 7.2 | 9.4 | 10.5 | 11.4 | 12.3 | 13.3 | 14.5 | 15.8 | 16.6 | 17.4 | 18.5 | 19.7 |
| | 1400 | 8.6 | 10.4 | 11.7 | 12.0 | 12.9 | 13.3 | 15.1 | 16.4 | 17.0 | 17.5 | 18.5 | 20.0 |

| | | MHz | Min |
|---|---|---|---|
| **Frequency Range** | | 12 - 1400 | |
| **Return loss (dB)[1]** | All Ports | 5 - 1006 | 20.0 |
| | | 1006 - 1400 | 12.0 |
| **Isolation (dB)[2]** | Tap to Tap | 12 - 300 | 40.0 |
| | | 300 - 470 | 35.0 |
| | | 470 - 700 | 30.0 |
| | | 700 - 1400 | 25.0 |
| **Screening Efficiency (dB)[3]** | | 12 - 300 | 85.0 |
| | | 300 - 470 | 80.0 |
| | | 470 - 950 | 75.0 |
| | | 950 - 1400 | 55.0 |
| **AC power blocking (Veff, min)** | All ports | 350 | |
| **Surge class conformance[4]** | All ports | 1 kV / 12 Ω | |
| **Material** | Housing | Painted chromatic conversion coated cast aluminium | |
| | F inner conductor | Tin nickel plated beryllium copper | |
| | IEC inner conductor | Copper nickel tin plated phosphor bronze | |
| **Impedance (Ohm, typ)** | | 75 | |
| **Dimensions (mm)** | L x H x D | 75 x 195 x 45 | |
| **IP class** | 54 | | |
| **Equipment Approval** | CE | | |

## Notes

| | |
|---|---|
| 1 | At F > 40 MHz, -1.5 dB/octave |
| 2 | At F > 300 MHz, -1.5 dB/octave |
| 3 | Test Method for frequencies according to EN50083-2 2012 |
| 4 | Tested according to IEC 61000-4-5: 2007 level 2 |

## Order information

| Item number | Item code | Description |
|---|---|---|
| **19011894** | TMT-1400-IEC | TMT-1400-IEC 1.4 GHZ 12-WAY TILTED MULTITAP |