

TW 8

Telecom Wave Impulse
Module 10 / 700 μ s
(with AXOS⁸ only)

Datasheet



HAEFELY

Current and voltage – our passion

General Description

Outdoor telecommunications networks typically have cable lengths of 300 m and more. Sometimes communication lines may even have a total cable length of several kilometres. The corresponding test impulse given by the applicable standard shows the typical waveform 10 / 700 µs – 5 / 320 µs as this waveshape is the most representative of actual surges encountered in the field.

Coupling via arrestors is the preferred coupling method for unshielded outdoor symmetrical communication lines. The coupling network also has the task of splitting the surge current into multiple pairs in multi- conductor cables.

The TW 8 Telecom Wave Impulse Module is the extension of your AXOS8 Immunity Test System if Telecom Surge Immunity Tests according to IEC/EN 61000-4-5 Ed. 3.0 figures A.2 and A.3 need to be performed.

When external TW 8 (Figure 9-3) module is connected it gets automatically indicated via the link cable (intelligent input). In the front view are three different coupling impedances (1 x 15 Ohm (HI-COM), 4 x 40 Ohm, 4 x 40 Ohm gas arresters) options. The user selects on the coupling unit (TW 8 module) which impedance is required for the particular application

Features	Advantages
▪ 2 pairs of communication lines or 4 lines individually Automatically controlled by AXOS⁸	☒ Plug and Play – With AXOS⁸
▪ Predefined according norm and individual setups available	☒ All in One – All interconnected cables included
▪ Predefined according norm and individual setups available	

Applications

- IEC/EN 61000-4-5 Ed.3.0 - Fig A.2 and Fig A.3:
- 10 / 700 us combination wave ITU K.20, K.21, K. 44, K. 45

Scope of Supply

- TW 8 module
- Bridge connector (short circuit)
- Calibration certificate
- Cable SUB-D 37p 1 m
- Earth cable 1 m

Technical Data

Block 1	
Output Voltage	0.2 – 7.0 kV $\pm$ 10%
Output Current	5 – 175 A $\pm$ 10%
Front time OCV	10 μ s $\pm$ 30%
Decay time OCV	700 μ s $\pm$ 20%
Polarity	Positive / Negative / Alternate
Mains Power supply	Powered by AXOS ⁸
Source Impedance / coupling	15 Ω x 1 40 Ω x 4 40 Ω gas arresters x 4
Front time SSC	5 μ s $\pm$ 20%
Decay time SCC	320 μ s $\pm$ 20%
Outputs	4 mm banana sockets
Trigger	Automatic 3 s – 100 minutes Manual

Environmental, Mechanical and Power Supply	
Dimensions (W x D x H)	450 x 490 x 180 mm (17.7 x 19.3 x 7.1 in)
Rack Size	19 in / 4HU – 7 in (177.8 mm)
Weight	16 kg Net. (35.3 lb)

Global Presence

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HIGH VOLTAGE



INSTRUMENTS



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