

PAT 50A / PAT 1000

Attenuators for EFT/Burst

IEC / EN 61000-4-4

- For EMC tests according to IEC / EN 61000-4-4
- For calibration of EFT/Burst generators
- Available in the following variants:
 - PAT 50A: 50 Ω
 - PAT 1000: 1000 Ω
 - EFT/Burst Verification Set: 50 Ω + 1000 Ω



For AXOS 5 and AXOS 8 devices from Haefely.

Overview

Burst generators and capacitive coupling pliers must be verified according to the current standard IEC/EN 61000-4-4. The pulse parameters of the burst generator are measured

- at the 50 Ohm high voltage output and
- at the output of the coupling network and
- at the output of the calibration set of capacitive coupling clamp

When using attenuators at the output of the coupling network, it is essential to ensure that the coupling network is not operated with voltage during the test.

The verification of the burst signal at the burst generator is done with a measuring impedance of 50 Ω or 1000 Ω . The measured voltage corresponds to a divider ratio X - see table (Technical Data). A measurement bandwidth of at least 400 MHz is required. The input impedance of the oscilloscope must be set to 50 Ohm.

Key facts

- If attenuators are used, **do not operate the coupling network with voltage** during the test.
- Verification of the burst signal at the burst generator is performed with a measuring impedance of 50 Ω or 1000 Ω
- Measurement bandwidth of at least 400 MHz required



PAT 50A / PAT 1000

Attenuators for EFT/Burst

Technical data

PAT 50A		PAT 1000	
Voltage	Designed for 8 kV EFT voltage	Voltage	Designed for 5 kV EFT voltage
Test load impedance	50 Ω \pm 2%	Test load impedance	1000 Ω \pm 2% // \leq 6pF
Divider ratio	54 dB	Divider ratio	60 dB
Connection	BNC connection to oscilloscope	Connection	BNC connection to oscilloscope

Options

No. 2490400	AXOS 5	Compact
No. 2490800	AXOS 8	Compact
No. 2499951	EFT/Burst Verification Set: PAT 50A + PAT 1000 + coaxial cable (1 m) in functional case	

Application

To verify an EFT/Burst generator proceed as below:

- (1) Connect the attenuator input directly to the EFT/Burst generator High Voltage output.
- (2) Connect the output of the attenuator to an oscilloscope with a suitable cable.
- (3) Set the oscilloscope input to 50 Ω .

If the EFT/Burst impulse is to be verified at the output of a CDN, a suitable adaptor is required. Both the generator and the oscilloscope must be connected to the ground plane properly.

Scope of delivery

PAT 50A (No. 2495491) or PAT 1000 (No. 2495441)

All information regarding appearance and technical data correspond to the current state of development at the time of release of this data sheet. We reserve the right to make technical changes. 022311

