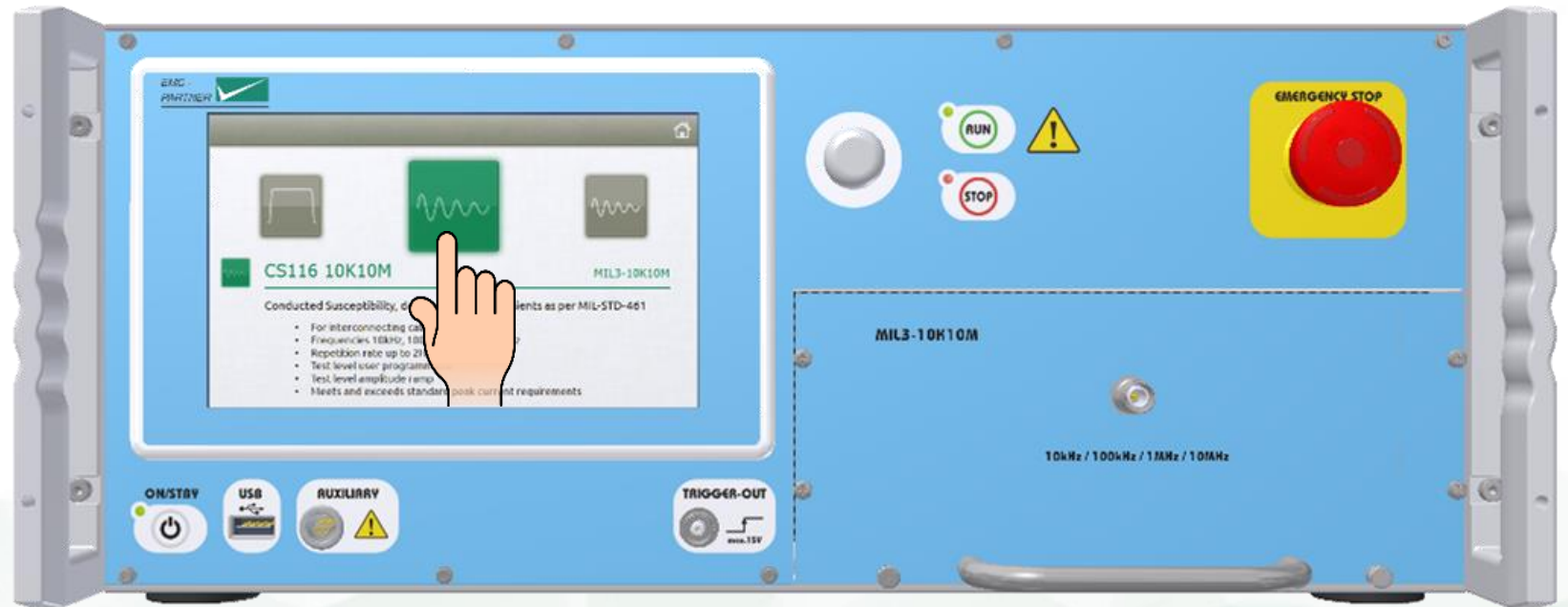


# MIL3000

The future in CS115/CS116 testing





## EMC PARTNER AG

- ✓ Founded in 1994
- ✓ **Swiss** private company, headquarters in Laufen
- ✓ Largest choice of impulse generators
- ✓ Market leading supplier, reputed worldwide
- ✓ Development, production and testing in house
- ✓ Global network of representatives

EMC PARTNER provides conducted immunity test solutions for a broad range of sectors



Industry &  
Household



Components



Renewable  
energy



Avionics



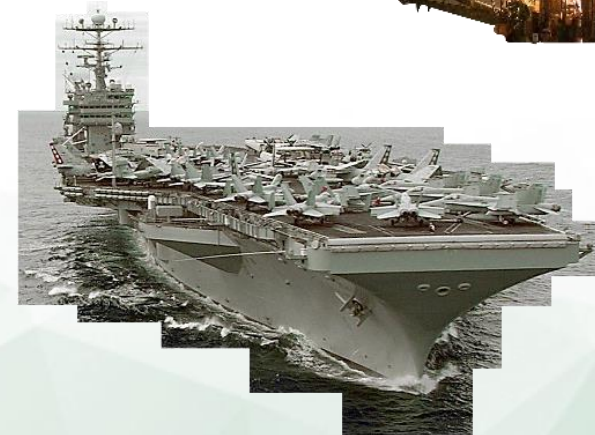
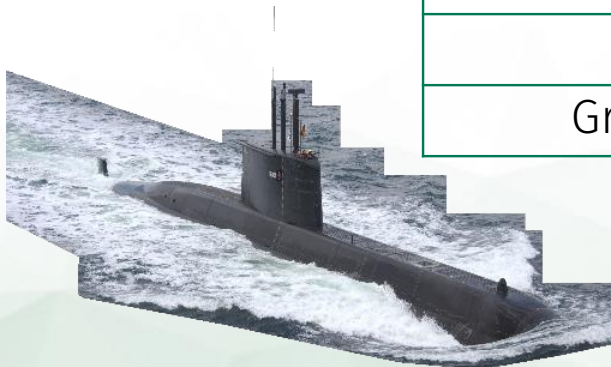
Military



Telecom

- ✓ Introduction
- ✓ CS115 test
- ✓ CS116 test
- ✓ MIL3000 test system
- ✓ TEM3000 software

## ✓ Categories



Equipment and Subsystems

Surface Ships

Submarines

Aircraft, Army, Flight Line

Aircraft, Navy

Aircraft, Air Force

Space systems, Launch  
Vehicles

Ground, Army

Ground, Navy

Ground, Air Force

- ✓ EMC PARTNER provides test solutions for current and previous MIL-STD-461 versions

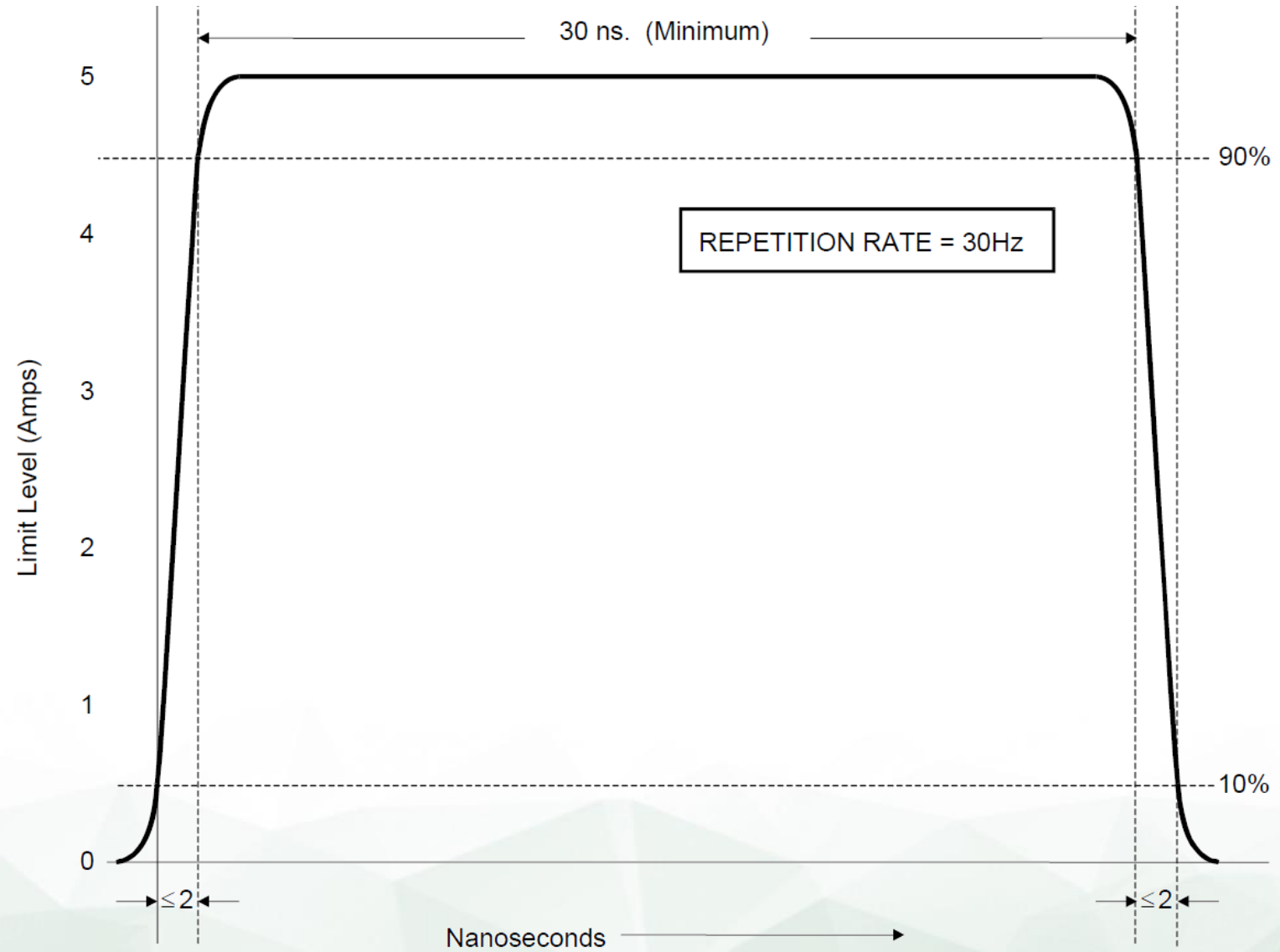
Test	Version F	Version G
CS 106	yes	-
CS 115	yes	yes
CS 116	yes	yes
CS 117	-	yes, new
CS 118	-	yes, new



- ✓ Overview on changes in MIL-STD-461G
- ✘ CS 106: transients, power leads – deleted
- ✓ CS 117: lightning induced transients – new
- ✓ CS 118: personnel borne ESD - new

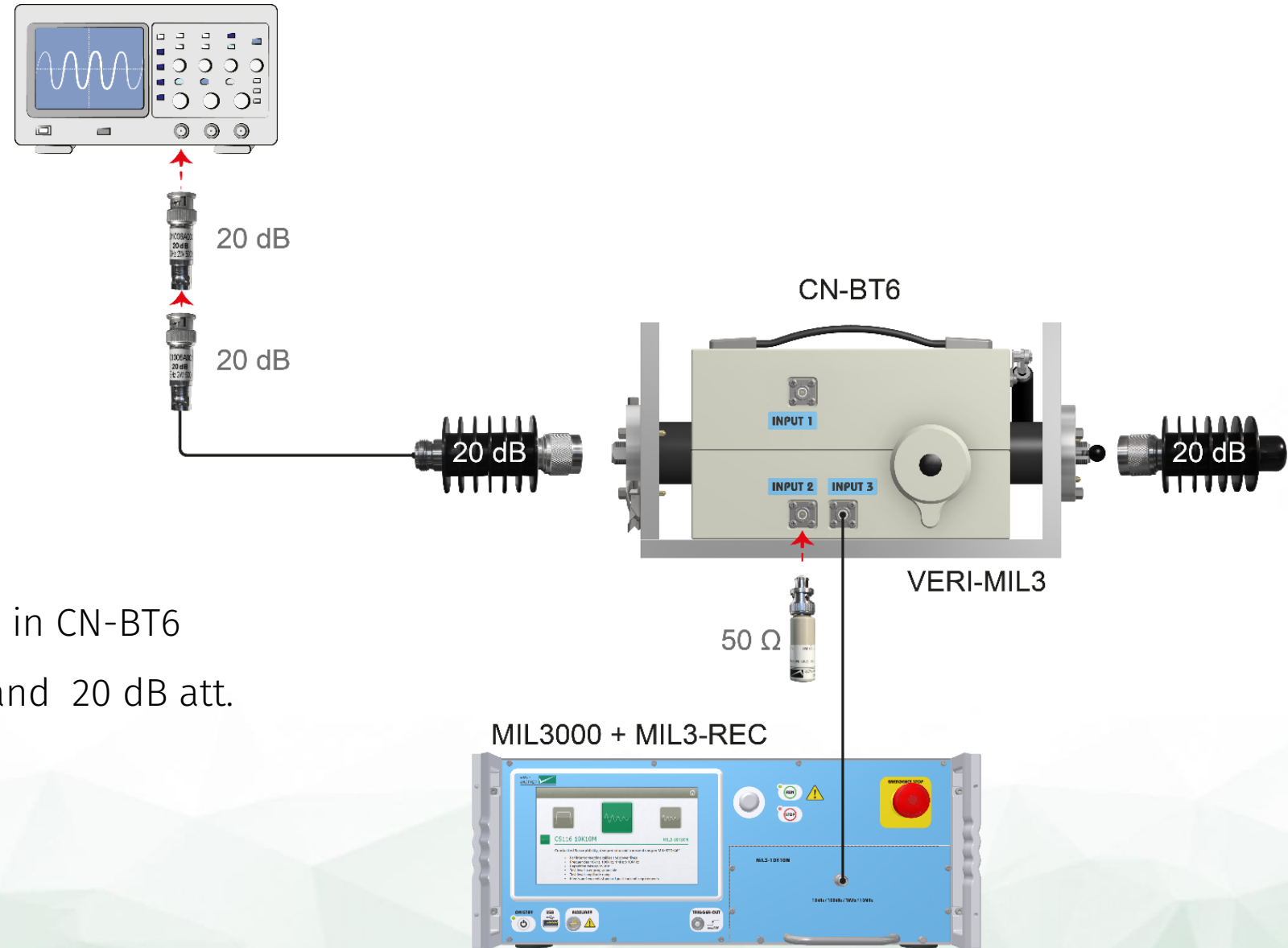
Test	Version F	Version G
CS101	yes	yes
CS 103	yes	yes
CS104	yes	yes
CS 105	yes	yes
CS 106	yes	deleted
CS 109	yes	yes
CS 114	yes	yes
CS 115	yes	yes
CS 116	yes	yes
CS 117	not defined	yes, new
CS 118	not defined	yes, new

✓ Waveform and test level



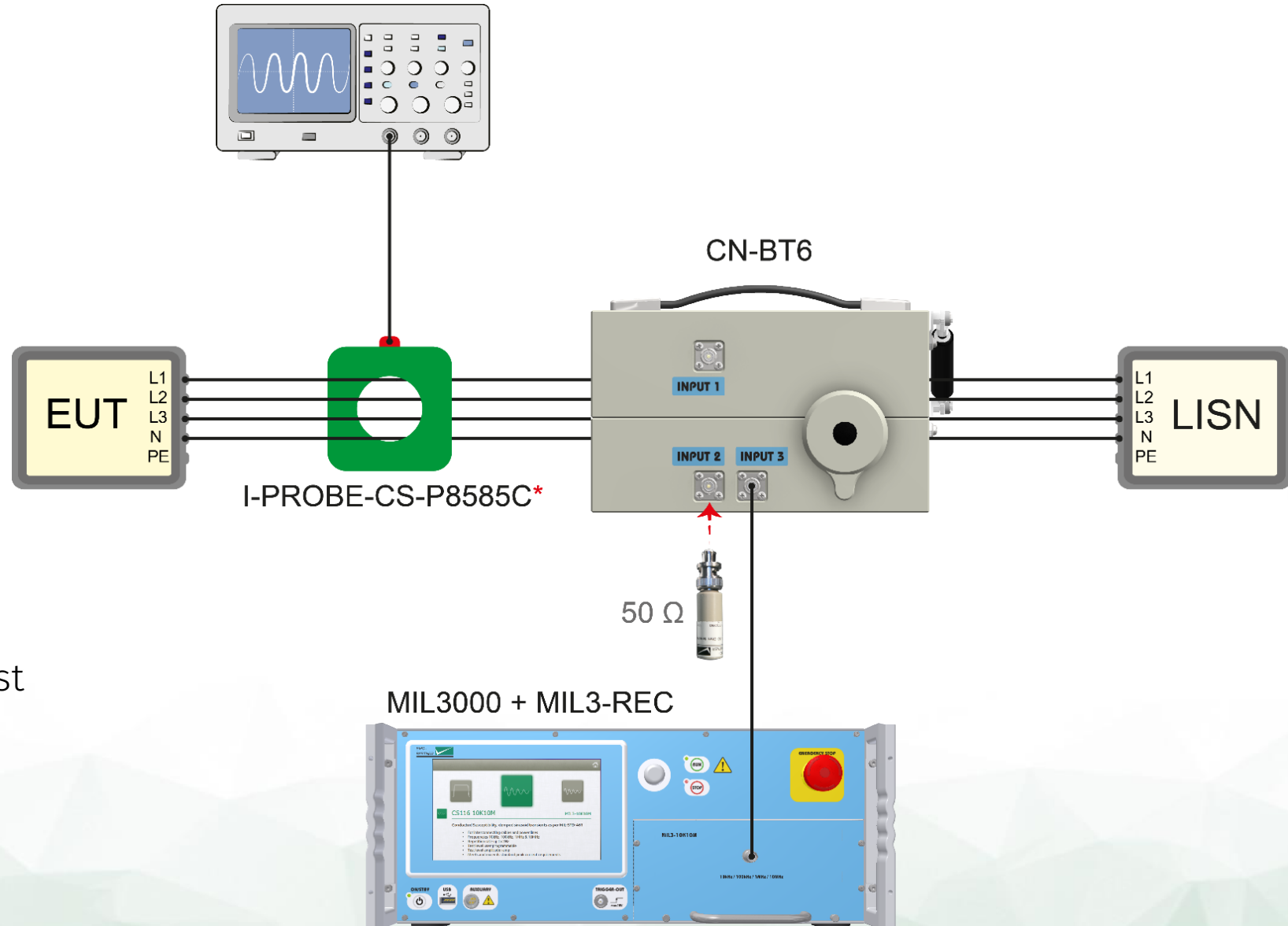


## ✓ Calibration setup



- ✓ 50  $\Omega$  termination is included in CN-BT6
- ✓ 2 x 20dB/50 $\Omega$ , N-BNC cable and 20 dB att. are included in VERI-MIL3

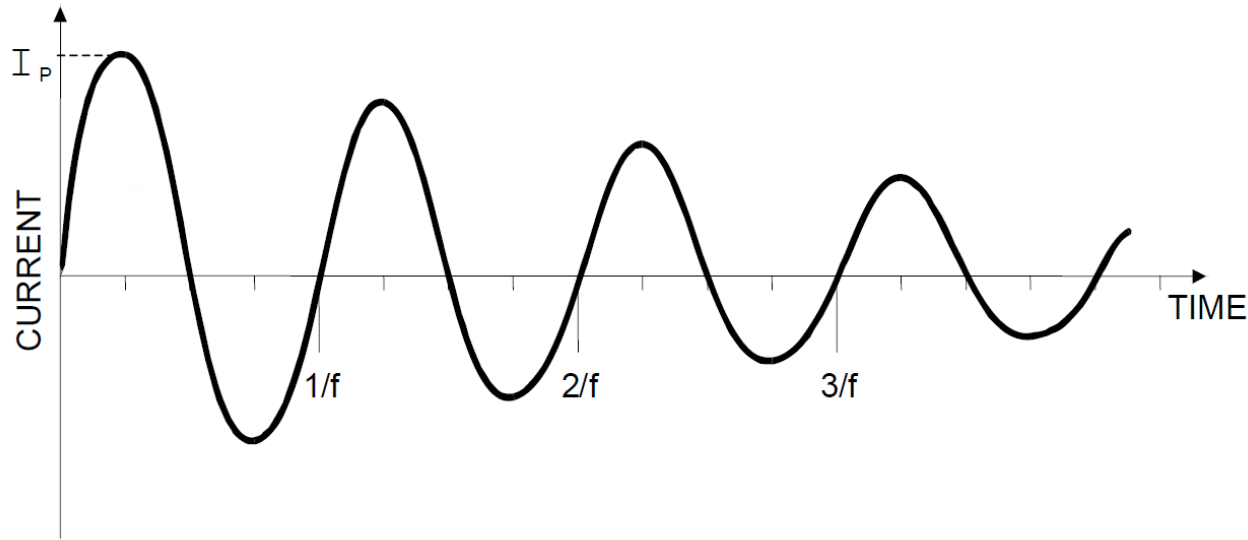
✓ Test setup



✓ MIL3000 system:

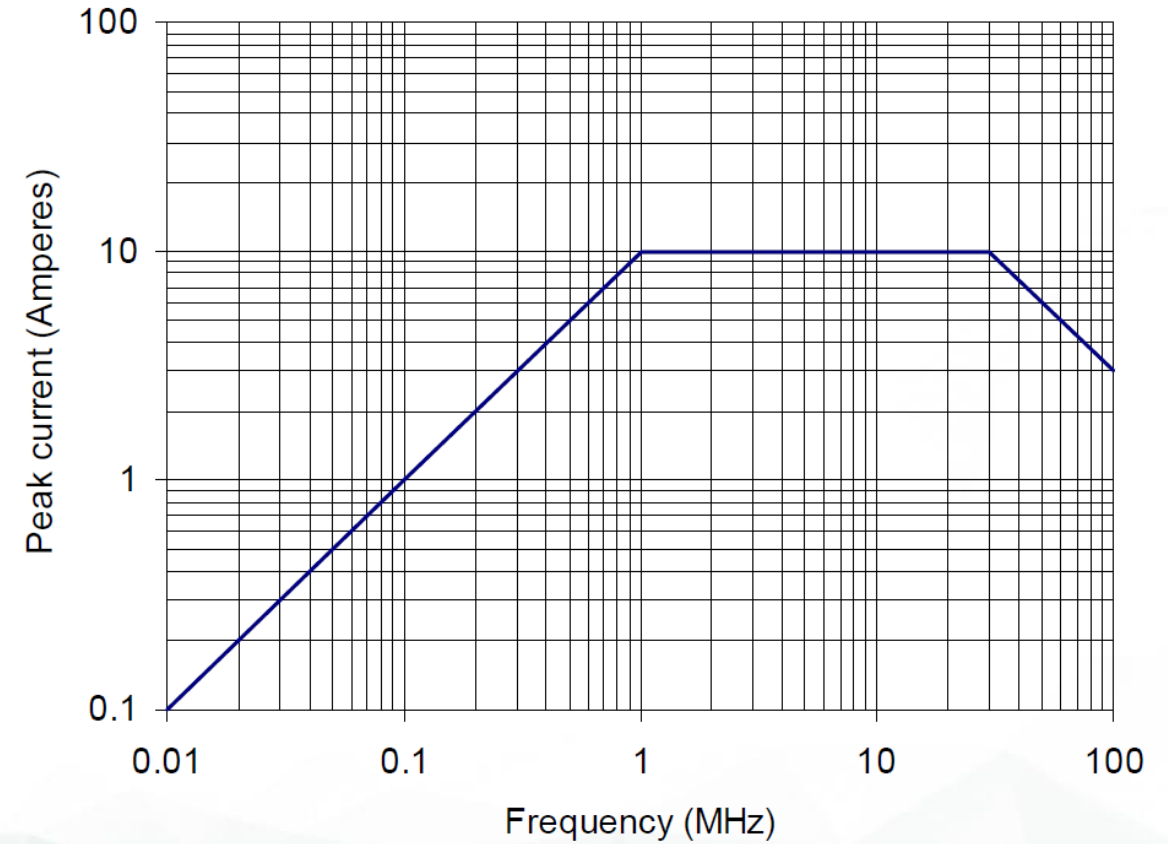
**fastest** way to start the test

✓ Waveform and test levels

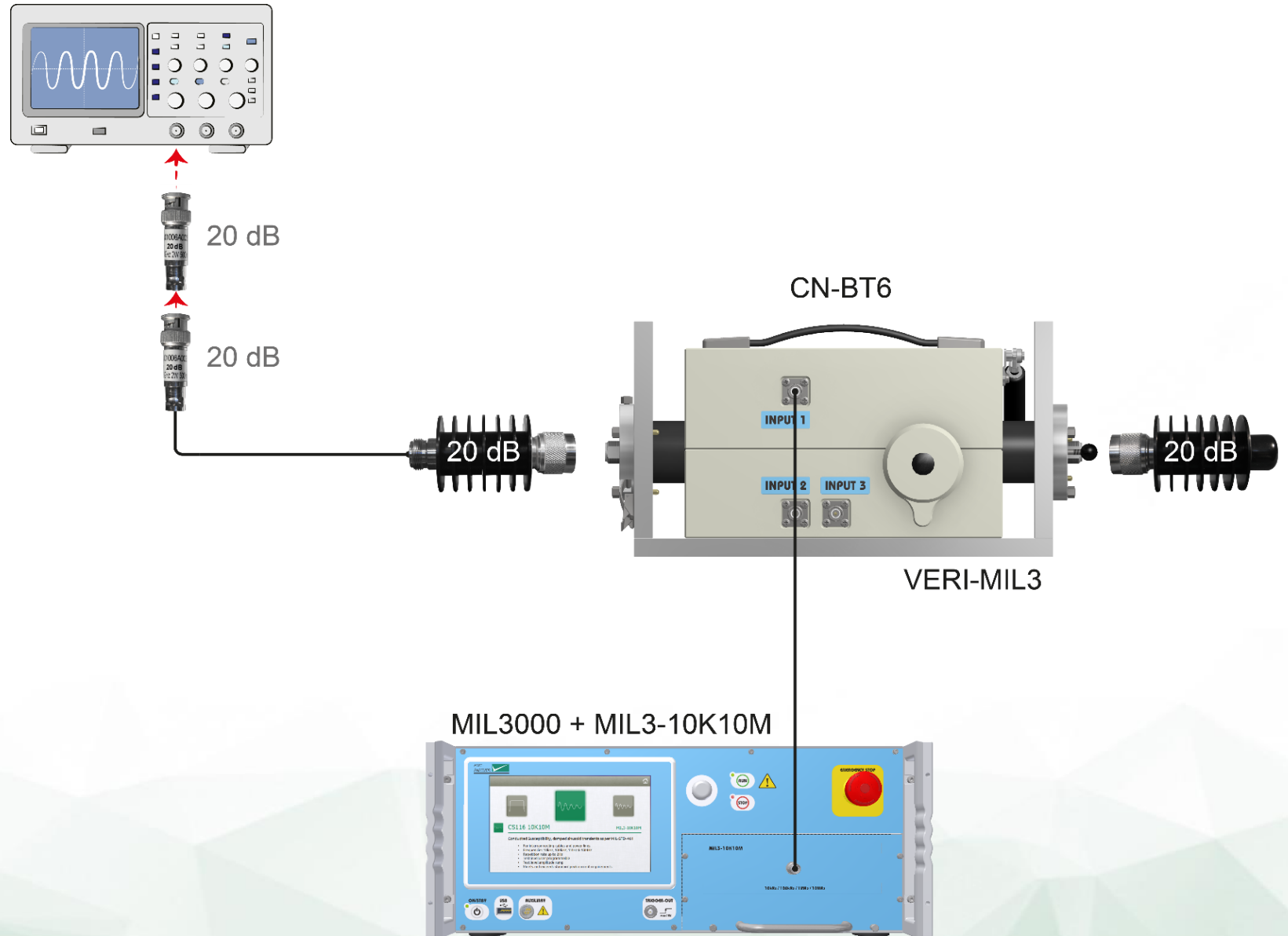


- f – frequency
- t – time
- Q – damping factor  $15 \pm 5$

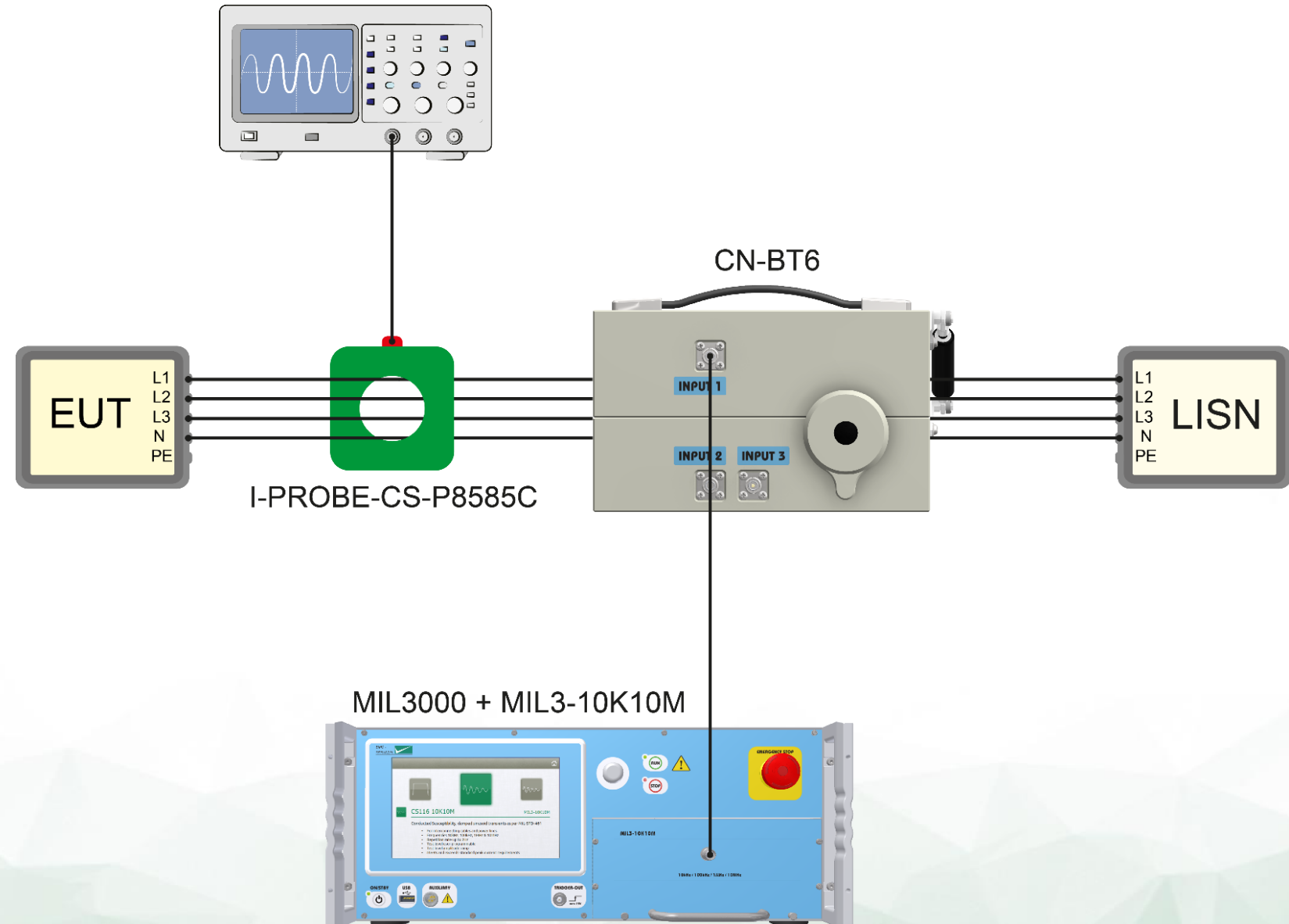
$$Q = \frac{\pi(N - 1)}{\ln(I_P/I_N)}$$



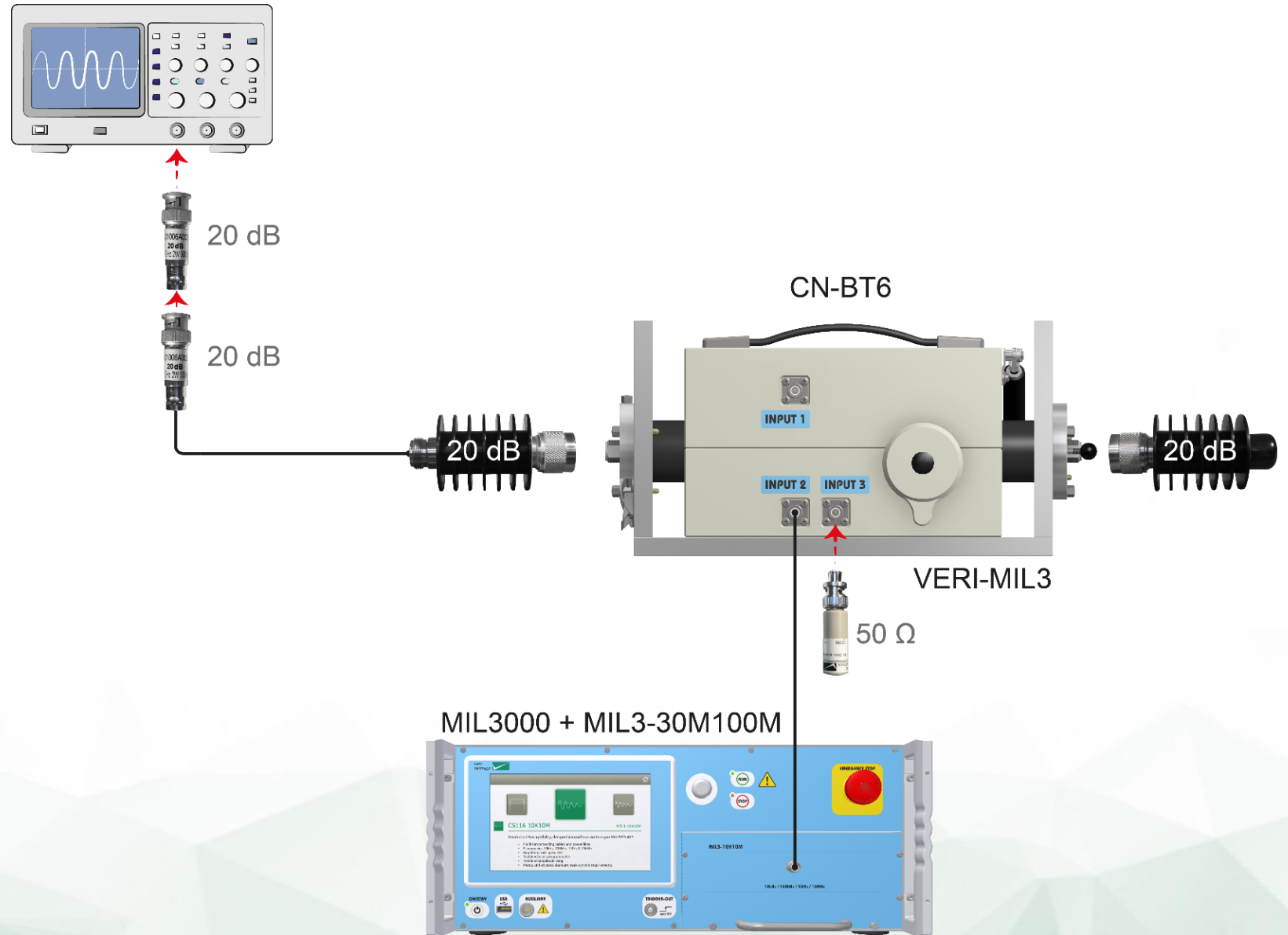
✓ Calibration setup 10 kHz – 10 MHz



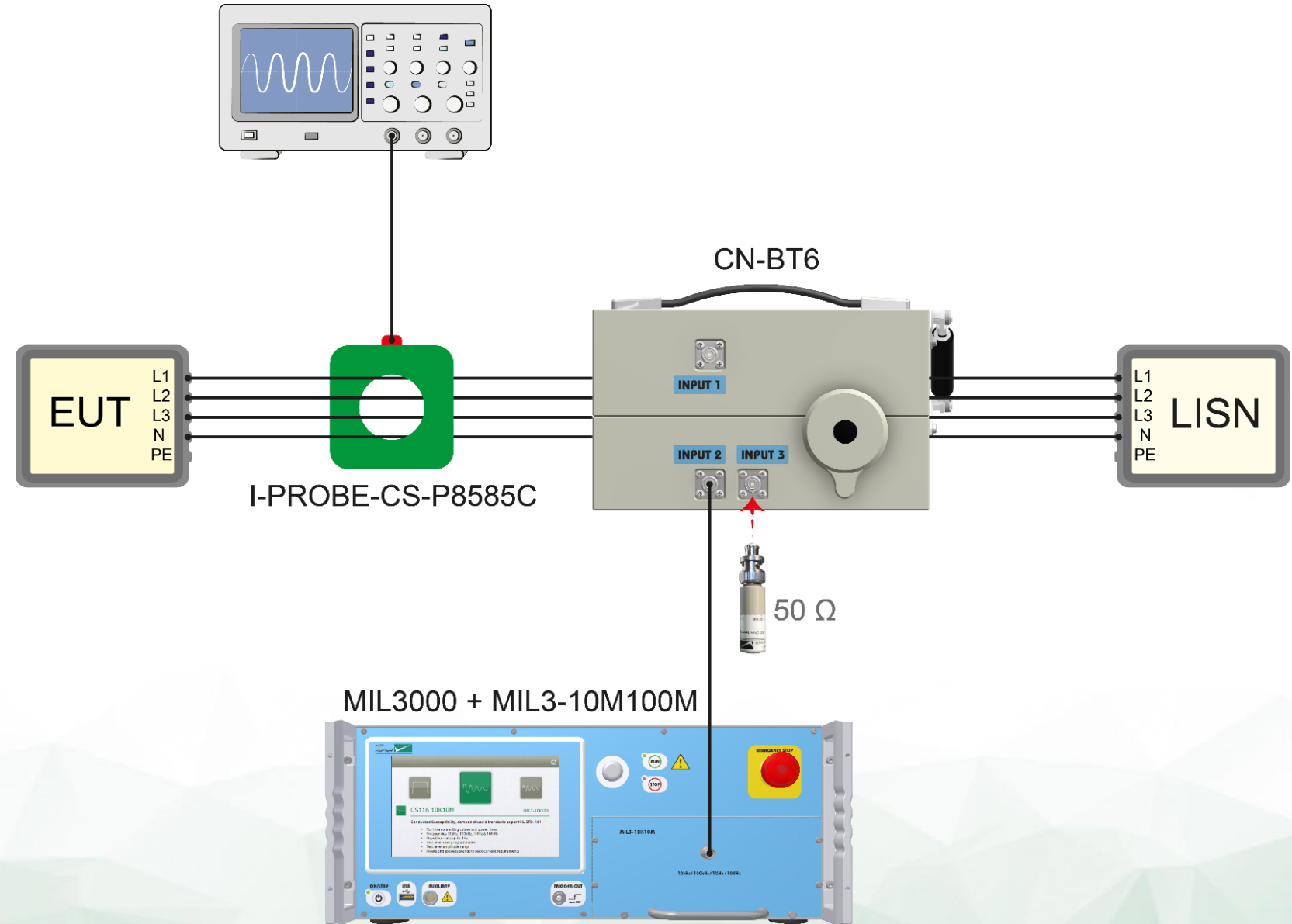
✓ Test setup 10 kHz – 10 MHz



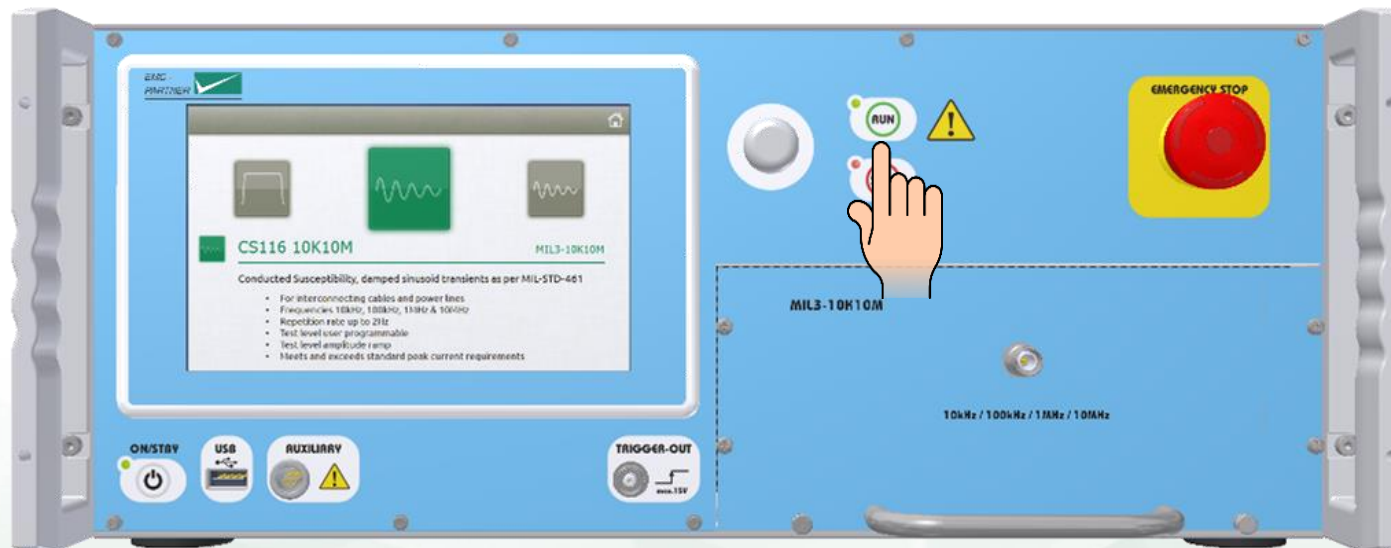
✓ Calibration setup 30 MHz – 10 MHz



✓ Test setup 30 MHz – 10 MHz

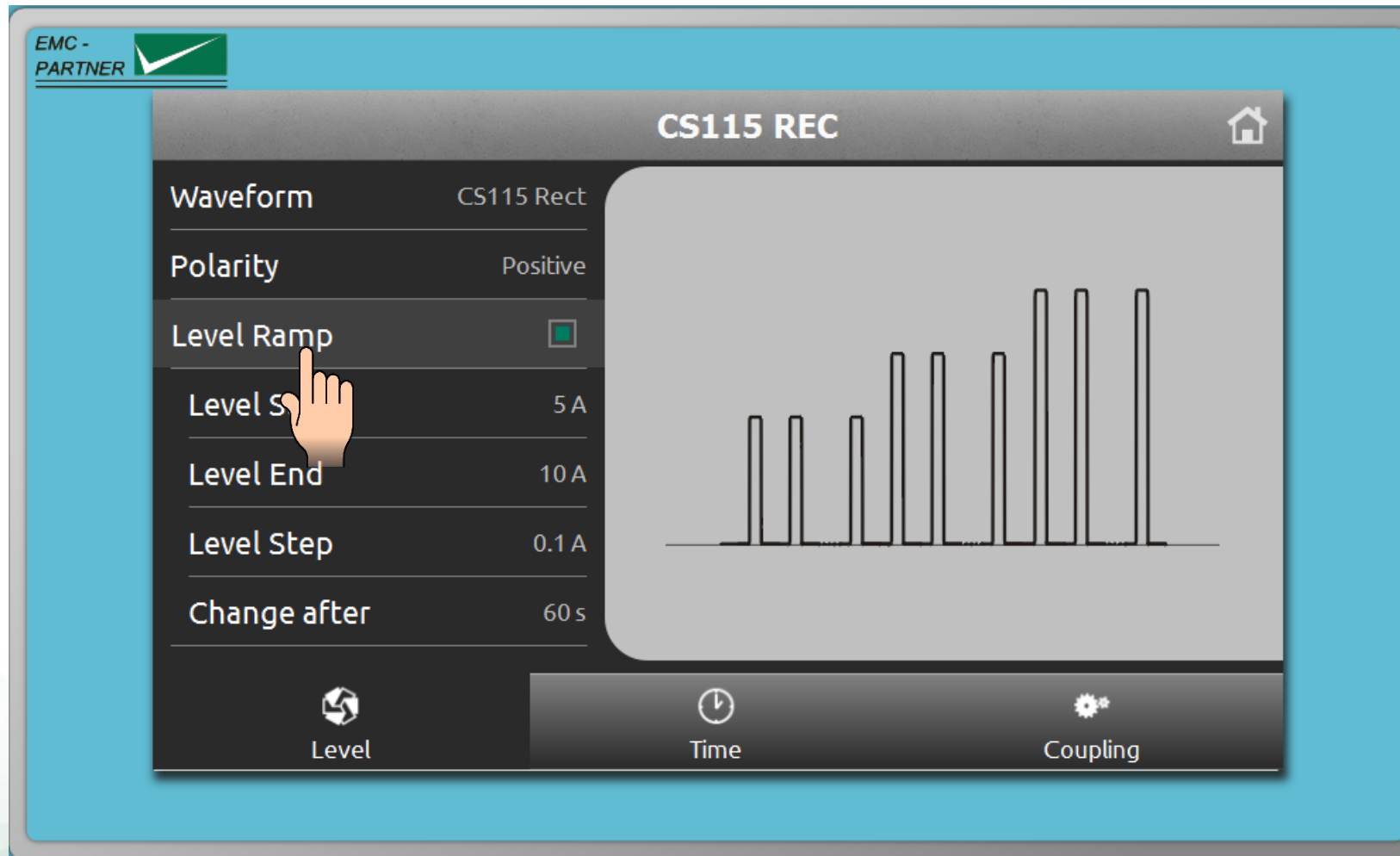


- ✓ Latest generation, solid state, **precise** technology
- ✓ **Fast** and **stable**: no generator or coupler adjustments required before test: the system is ready for calibration or test in **less than ½ minute**
- ✓ **Reliable**: from its launch date September 17<sup>th</sup>, 2015, until February 17<sup>th</sup>, 2017: **no** EMC PARTNER MIL3000 test system required repair or maintenance (zero issues)

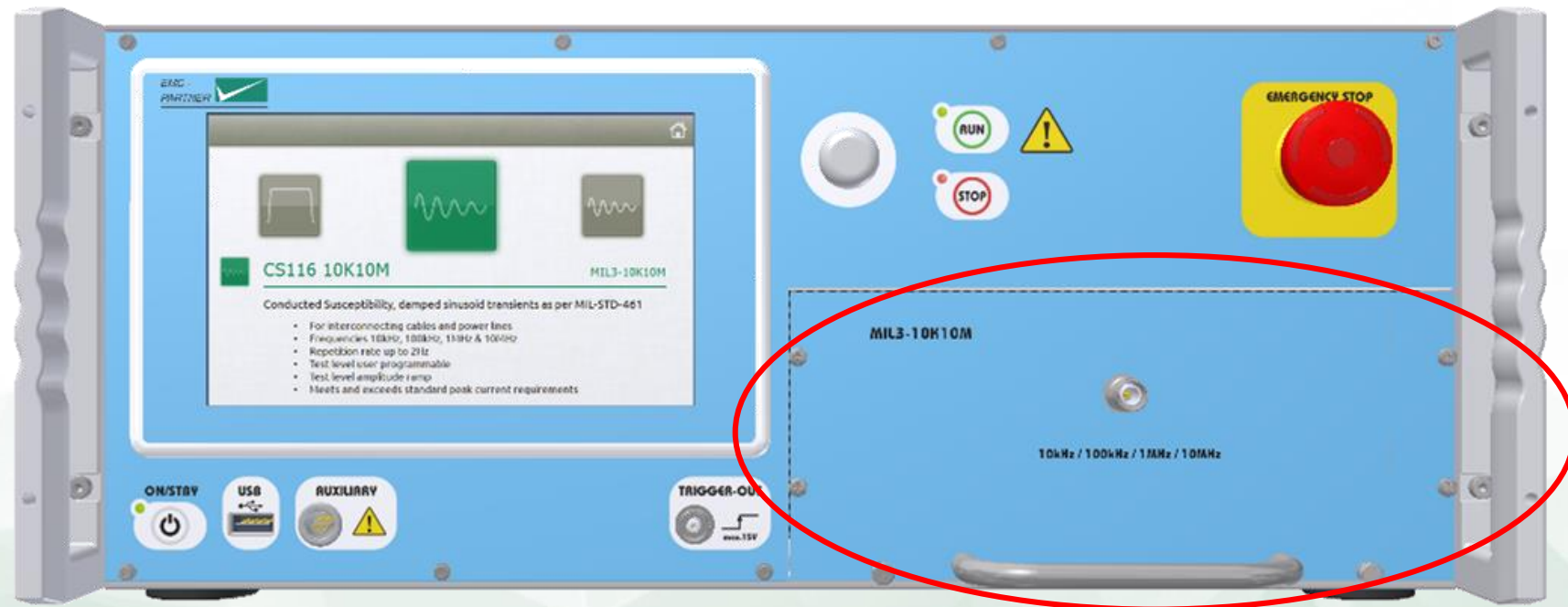
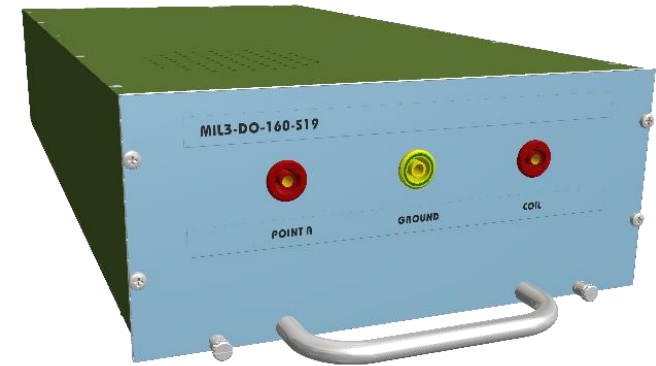
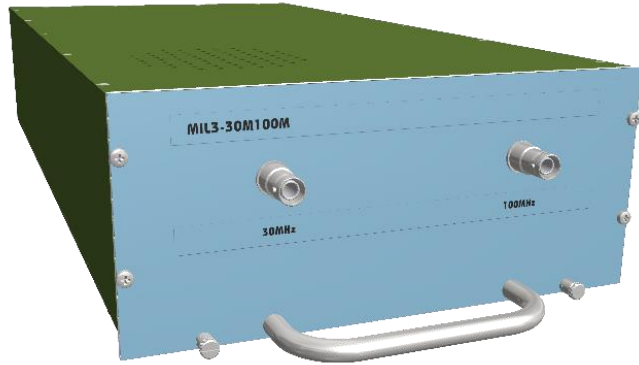




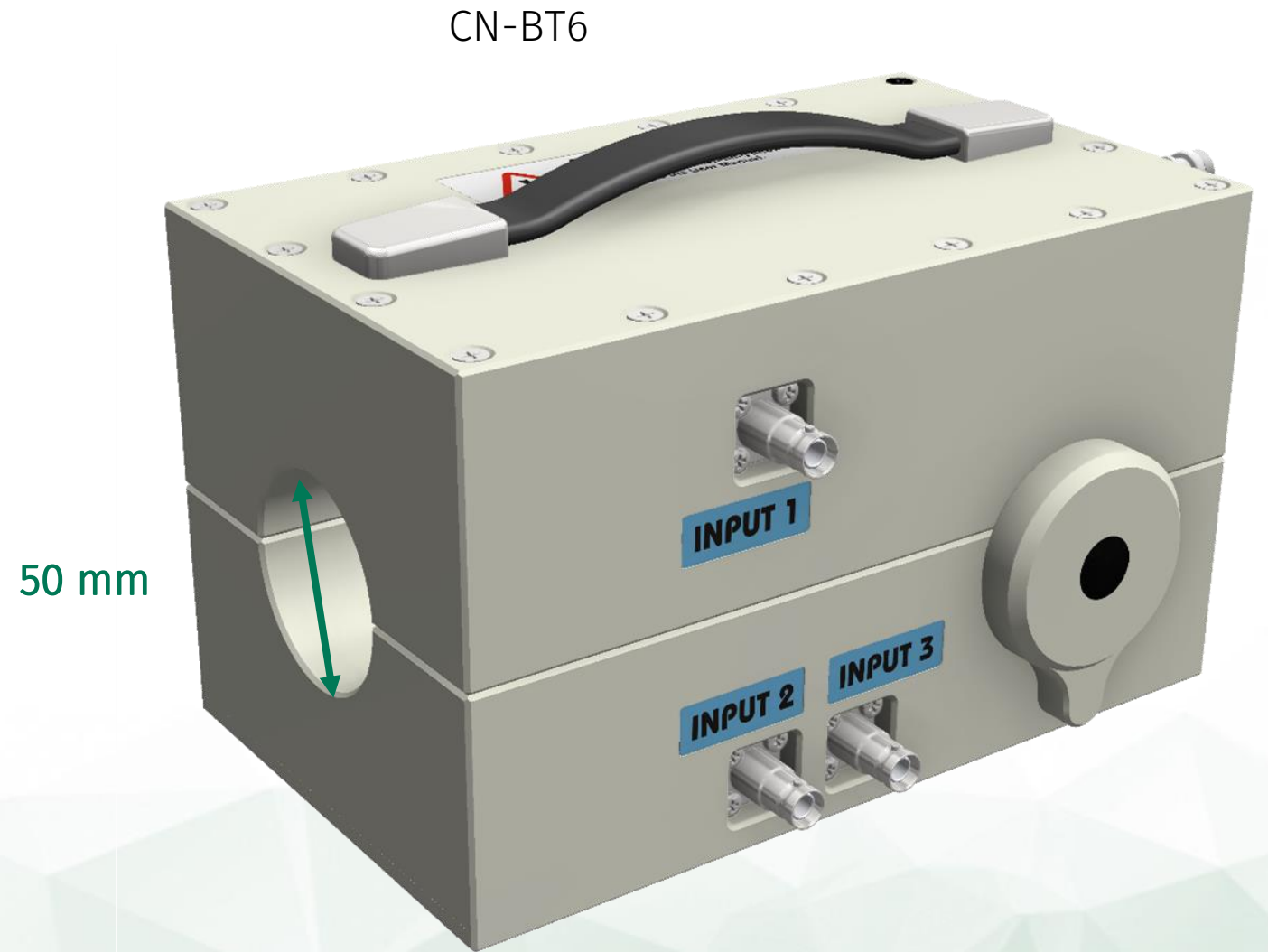
- ✓ Touch screen and proprietary operating system (lifetime free upgrade)
- ✓ Contextual help for all menu entries and explanatory diagrams



- ✓ Modular, on site upgradeable system based on plugin technology
- ✓ Outstanding performance allowing speedy setup and test execution



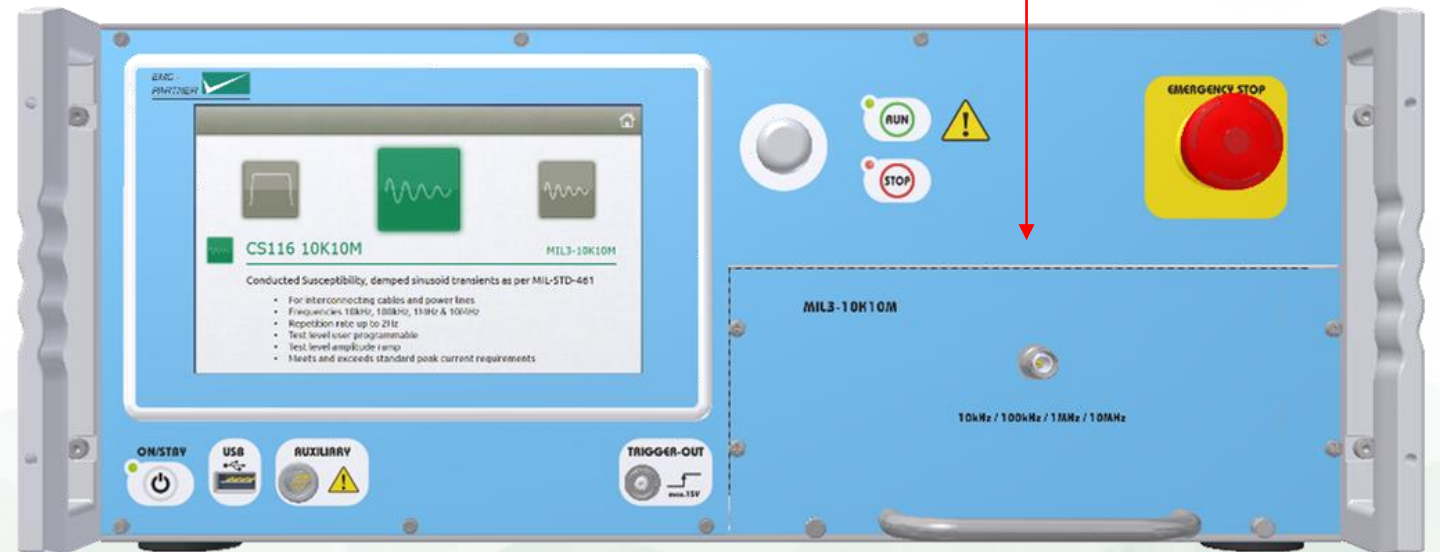
- ✓ Only one coupler for CS115 and CS116 (all frequencies)
- ✓ No change of EUT cables' position
- ✓ Electronic polarity change
- ✓ Change of parameters during the test



Besides CS115 and CS116, following modules are available now:

- ✓ MIL-STD-461F CS106 (synchr. up to 800 Hz)
- ✓ MIL-STD-1275B Spikes
- ✓ DO-160G Section 17 Spikes (synchr. up to 800 Hz)
- ✓ DO-160G Section 19 Induced Signals
- ✓ Custom modules possible

New plug-ins can be ordered anytime



## Unique software: TEMA3000

- ✓ Lifetime upgrade
- ✓ Remote control of generator
- ✓ Test sequence function
- ✓ Configurable test reports
- ✓ Collection of standard requirements preprogrammed
- ✓ Modular

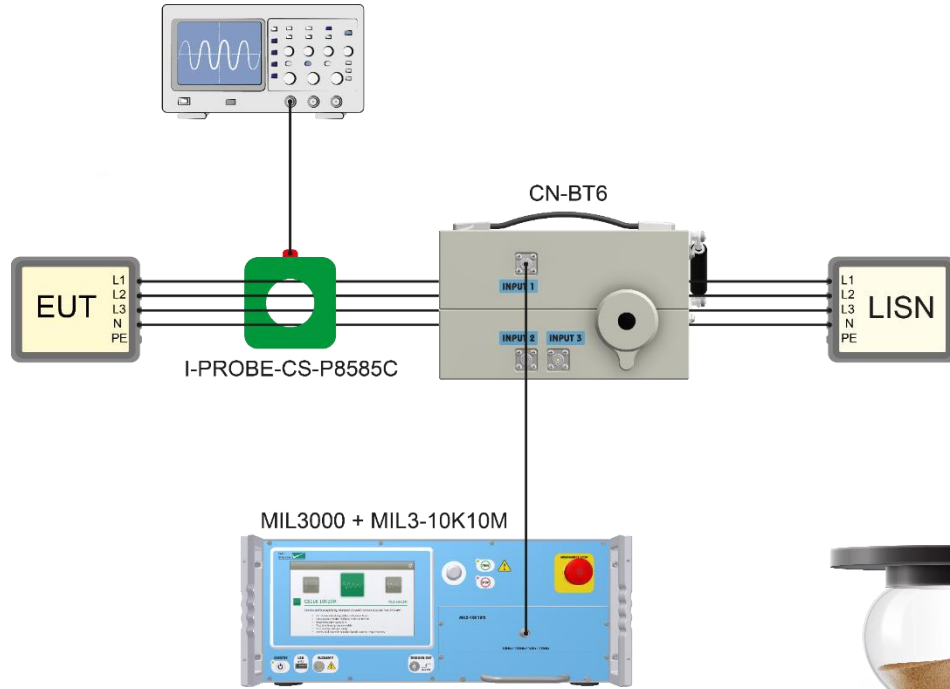


## Unique software: TEMA3000

- ✓ Automatic DSO control
- ✓ Automatic inclusion of DSO screenshots in test report
- ✓ Programmable report templates
- ✓ Advanced functions like Q factor automatic computation and inclusion in test report
- ✓ Download and try TEMA3000:  
[www.emc-partner.com](http://www.emc-partner.com)



# Save time and costs with an automated solution: MIL3000!



Thank you !



Contact us worldwide: [www.emc-partner.com](http://www.emc-partner.com)