

EMP Original Technology
USA APELC & KTI EMP TEST SYSTEM

The Best or Nothing Technology over the world



Faster rise time than 20ns is a most important evaluation factor for EMP Pulse Generator

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Model : SPG-188125-E1-A

Electrical Specifications

- ☞ Peak current: ≤ 1.1 kA variable
- ☞ Pulse rise time: < 20 ns
- ☞ Pulse width (FWHM): 500 – 550 ns
- ☞ Peak erected voltage: 46 kV, Max charge voltage : 23kV
- ☞ Pulse shape: Double exponential
- ☞ Impedance ≥ 60 Ohms
- ☞ Charge time: < 1 minute
- ☞ Insulation: solid dielectrics and dry breathable air
- ☞ Power rating: 230 VAC / 60 Hz / single phase

Inductive coupler

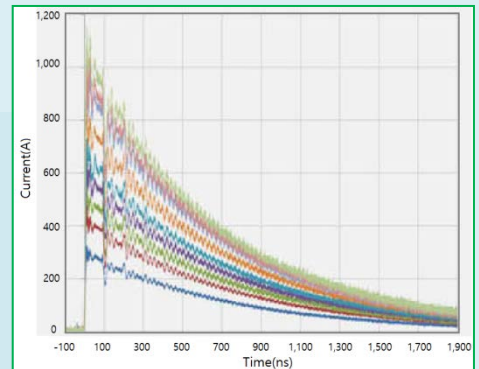


Inductive coupler
& calibration fixture

Direct current injection Adapter



Dry air whip



Model : PS-EMI-188-125 E1-5K

Alternative configuration

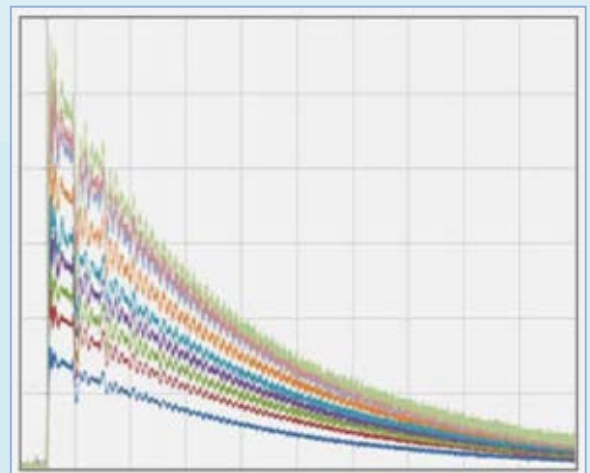


Accessories

- 1) Battery Charger
- 2) Fiber optic cables
- 3) Oknonite 2042 High voltage cable
- 4) Calibrated Dummy Load
- 5) Rugged Scissor Jack
- 6) Optical remote controller

Electrical Specifications

- 👉 Peak current: 5 kA
- 👉 Pulse rise time: < 20 ns
- 👉 Pulse width (FWHM): 500 – 550 ns
- 👉 Current adjustment: <1 kA – 5 kA
- 👉 Peak erected voltage: 100 to 350 kV
- 👉 Pulse shape: Double exponential
- 👉 Impedance ≥ 60 Ohms
- 👉 Charge time: < 1 minute
- 👉 Insulation: Solid dielectrics and dry breathable air
- 👉 Power rating: 230 VAC / 60 Hz / single phase



Model : PS-EMI-188-125 E2-INT



Electrical specifications

- ☞ Peak current: 250 A
- ☞ Pulse rise time: 1.5 μ s
- ☞ Pulse width (FWHM): 3 ms – 5 ms
- ☞ Current adjustment: 10 A – 250 A
- ☞ Source impedance > 10 Ohm
- ☞ Charging voltage: < 3 kV
- ☞ Pulse shape: double exponential
- ☞ Charging time: < 45 seconds
- ☞ Power rating: 230 VAC / 50 Hz / single phase
- ☞ Dimensions (H x W x D): 106 cm x 69 cm x 91 cm
- ☞ Weight: Approximately 115 kg

♠ Included equipments ;

Battery charger, Fiber optic cables, RG-214 coaxial output cable assembly with APELC quick connection
Dummy test load and User, maintenance and safety manuals

KTI, MIL STD 188-125 SE Test system

Model: KSE 250W

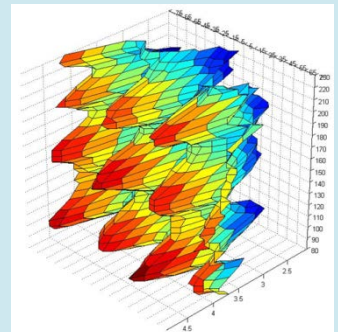


* Main system except various probes could be commonly used for SE & CW

Electrical specifications

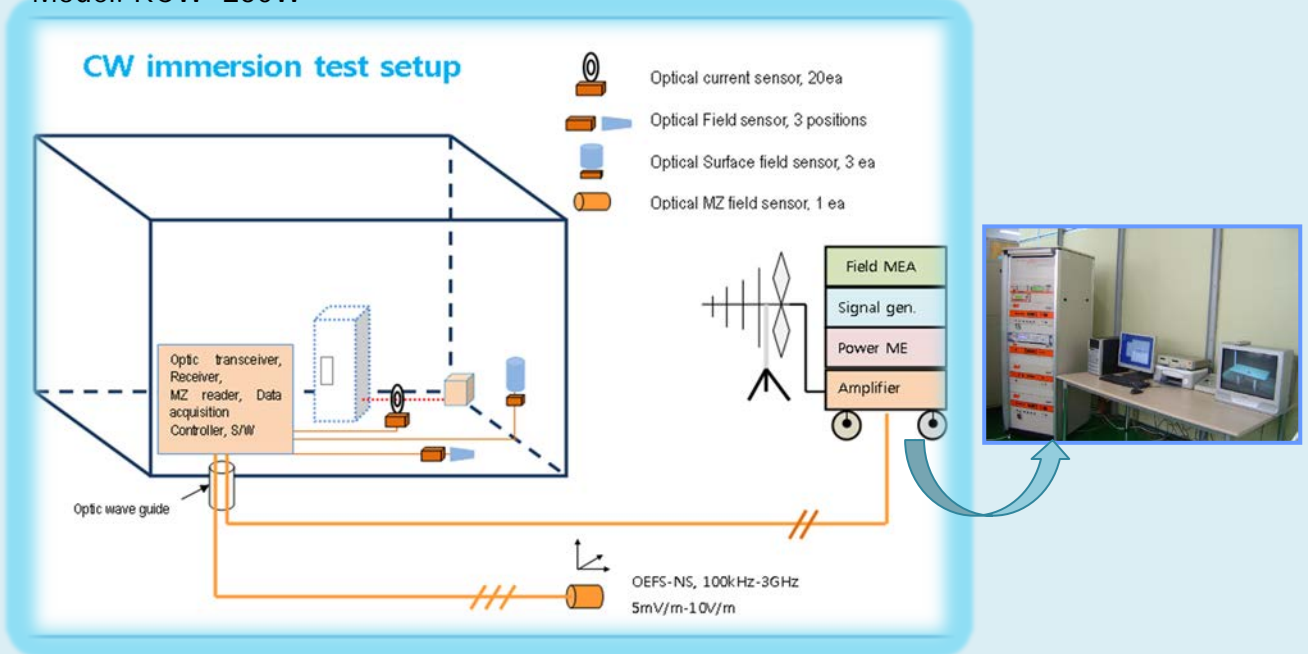
Items	Specifications	Main feature
Frequency band	10kHz-1GHz(40GHz)	<ol style="list-style-type: none"> 1. Minimized the Back ward reflection 2. Full redundancy on user requirements 3. User kindly designed menu <p>* End user options</p> <ol style="list-style-type: none"> 1. Leaky coaxial SE test 2. Full optical field sensor with MZ sensor 3. Full duplex optical telephone 4. Full optical Antenna positioner for SE automation 5. Field 3D mapping & Automation
Control S/W	GPIB, RS 232C Optical fiber	
Signal Source	Type A : Signal generator Type B: Network Analyzer	
Receiver	Type A : Spectrum Analyzer Type B: Network Analyzer	

Model : AFP3.5x3



KTI, MIL STD 188-125 CW Test system

Model: KCW- 250W



MIL-STD-188-125-1 CONTINUOUS WAVE(CW) IMMERSION

Monitoring Configuration

Measurement

- Electric free-field(XYZ)
- Magnetic free-field(XYZ)
- Surface current(XY)
- Current meas. (20 locations)

Field strength selection

Equipment

RF Source moving Rack

Signal Generator
 Low Amp1 High Amp2
 Power Meter
 Monopole Bi-log Ant

Reference Field Sensor

MZ sensor A MZ sensor B
 Receiver

Numbers of Sensor Selection

F/O Current (10 / 20) Channel

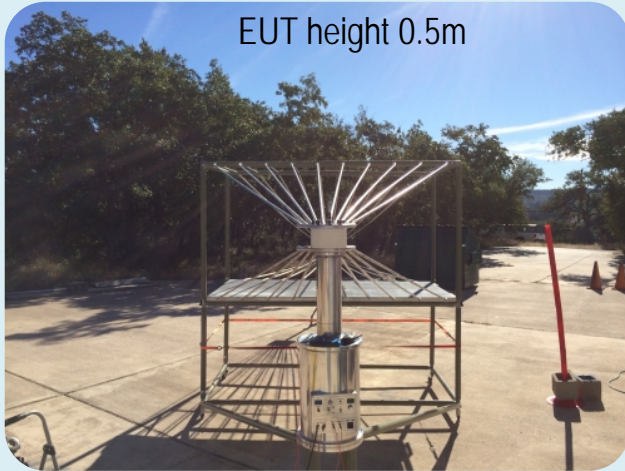
F/O Surface Current (2 / 3) Channel

F/O Free-Field (4 / 5) Channel

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Main features:

- ◆ Optimum field strength selection in accordance with RF source activated condition in the nominal 100dB shielded room.
- ◆ Full automatic pass/fail decision
- ◆ Minimized the measurement time and number of test set up change under the CW test.
- ◆ Easy to use and user kind GUI



EUT height 0.5m



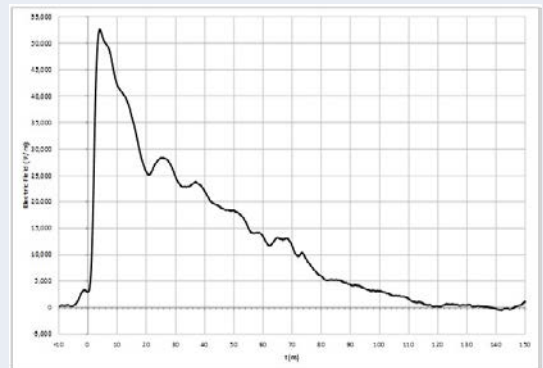
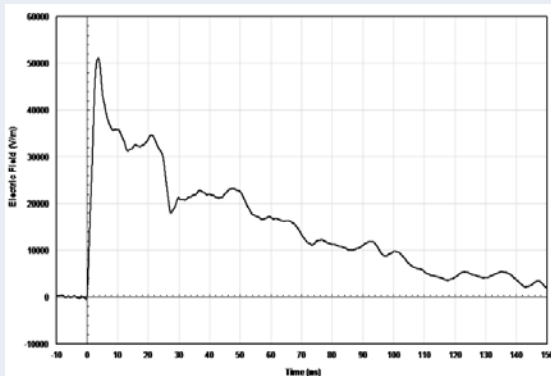
EUT height 1m

Specifications

EUT height 0.5m model

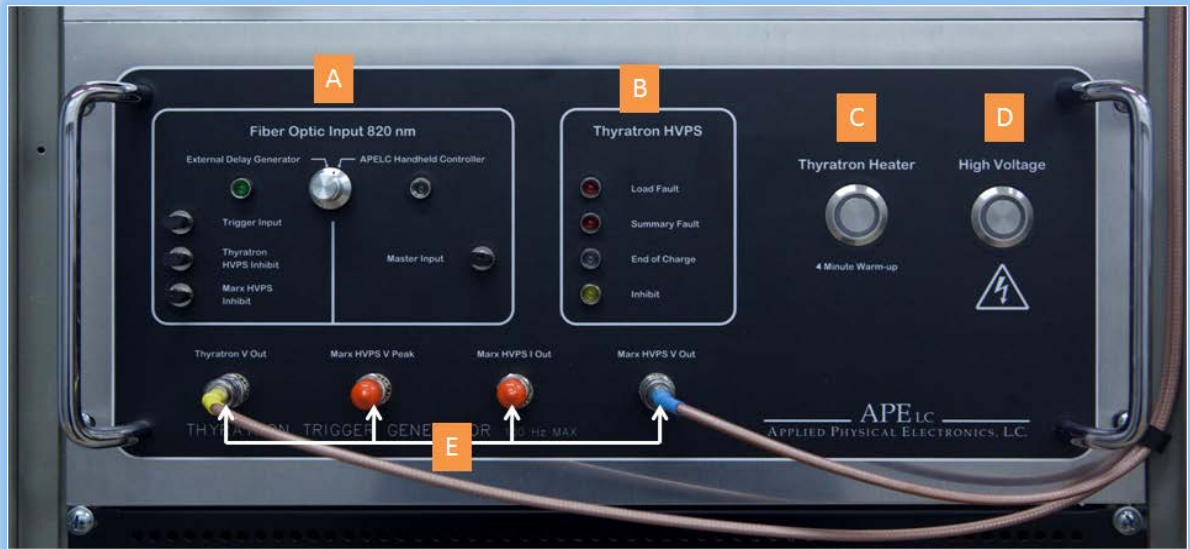
EUT height 1m model

Standard	MIL STD 461F,RS 105	Unit	MIL STD 461F, RS 105
Max. EUT size	0.5	m	1m(Cell size : 21.6 L x 6W x 3.8m.H)
Pulse rise time 10-90%	1.8-2.8	ns	1.8-2.8ns
Pulse width FWHM	18-20	ns	18-29ns
Electric field Strength	50-60	kV/m	5-50kV/m



* EMP 측정장비는 펄스 상승시간이 생명입니다.

RS 105 Test system Control



RS 105 Test system Control GUI

