

MV60

DAC Test and Diagnosis System 60 kV, up to 36 kV cable systems



realDAC[®]
HIGH VOLTAGE

Efficient, integrated diagnostics, comprehensive results

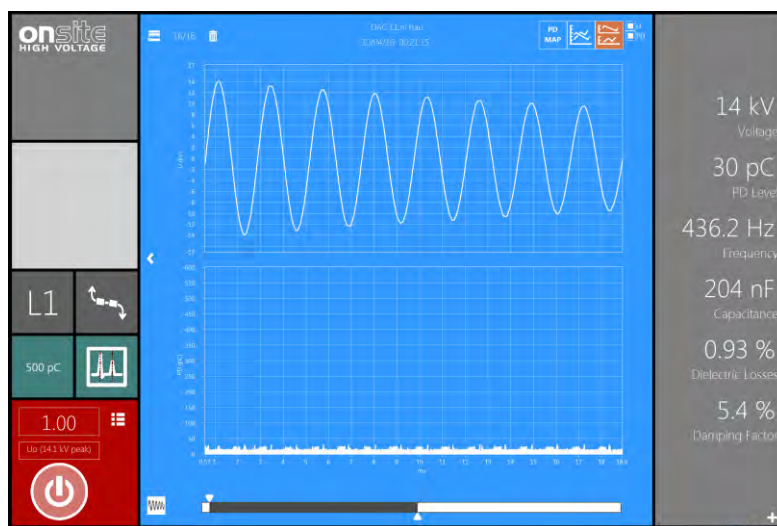
- ✓ Powerful PD monitored DAC withstand testing with application of IEEE, IEC, CENELEC and Cigré recommendations
- ✓ Highly sensitive PD measurement and diagnosis with automatic real-time PD localisation
- ✓ Integrated dissipation factor measurement at DAC voltages
- ✓ Easy WIFI based automatic PD range calibration: from 1 pC up to 150 000 pC
- ✓ Compact and lightweight
- ✓ All in one onsite testing and diagnosis of MV power cables up to 36 kV
- ✓ Built in Time Domain Reflectometer (TDR)
- ✓ Optional dual sided PD measurement and localisation (ds version)

The inventor of realDAC[®]

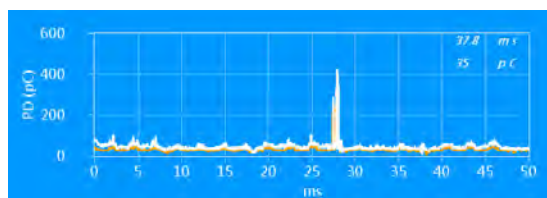
Technical Data MV60, (MV60+,MV60ds, MV60ds+)

Max. output voltage	2 ... 60 kV _{peak} , 42.4 kV _{rms} Precision +/- 1 % Resolution 0.1 kV
Coil inductance	app. 1.5 Henry
Frequency range damped AC	20 Hz ... 800 Hz
DAC Test object capacitance range	up to 10 µF @60kV, (15 µF for + version)
HV energizing current	9.0 mA (18mA for high power + version)
PD measuring range	1 pC ... 150 nC
PD measuring bandwidth	Acc. to IEC 60270
PD localisation bandwidth	150 kHz – 50 MHz, wide range automatic bandwidth adaptation for short and long cables
PD measuring accuracy	1 pC
PD localisation accuracy	1% of cable length (+/- 6 m for ds version)
TDR joint localisation in calibration mode	Integrated
Dissipation factor estimation range	1 x 10 ⁻³ ... 10 x 10 ⁻² / 0.1 ... 10.0 %
System software	User selectable graphical interface, online "live" PD Mapping, integrated measurement Database
Analysis software	DAC Explorer software, comprehensive viewing, processing, analysing and reporting of measurement data
Power supply	Singe phase AC 110 ... 240 V, 48 ... 63 Hz, 759 VA, (1400 VA for + version)
Operation temperature	-25 °C ... + 65 °C non condensing
Net weight	83 kg (system), (87kg for + version)
Dimension	Ø 610 x H 850 mm

improvements to specifications are subject to change without notice



Damped AC (DAC) testing mode screen, Voltage and PD



Near and far end PD display on DAC master unit (ds version)

Applications

- Capable of performing all necessary on-site tests and measurements on all types of power cables up to 36 kV
- After-laying testing of newly installed or repaired cable systems
- Testing in line with IEC 60502, IEEE 400 and CENELEC HD 620
- Routine testing and diagnostics for assessment of service-aged cables
- PD monitored voltage withstand testing and non-destructive diagnostic testing
- Comprehensive PD measurement capabilities according to IEC 60270, IEC 60885-3, IEEE 400.3

Features

- Modular compact DAC system
- PD monitored withstand test by applying DAC voltage excitations up to 60 kV_{peak}
- Measurement of PD level, PD inception and PD extinction voltage
- Phase resolved PD analysis
- Multiple PD spot localisation in cable insulation and accessories
- Extended diagnosis with tip-up Tan δ values at DAC voltages
- Online "Live" PD Mapping
- Simple test and diagnosis for short and long cables
- New wireless controlled calibrator, simple, fast calibration
- Calibration by cable length or propagation velocity
- New graphical user interface, user can select the preferred data view
- Extendable with dual side measurement systems (DS Series)
- Optional PD Extender can be placed up to 50 metres away from the system