Power cable testing and diagnosis

onsite HIGH VOLTAGE

DS300

PD Test and Diagnosis Measurement
Dual Sided PD measurement for 300 kV_{peak}

realDAC® HIGH VOLTAGE

Efficient, integrated diagnostics, comprehensive results

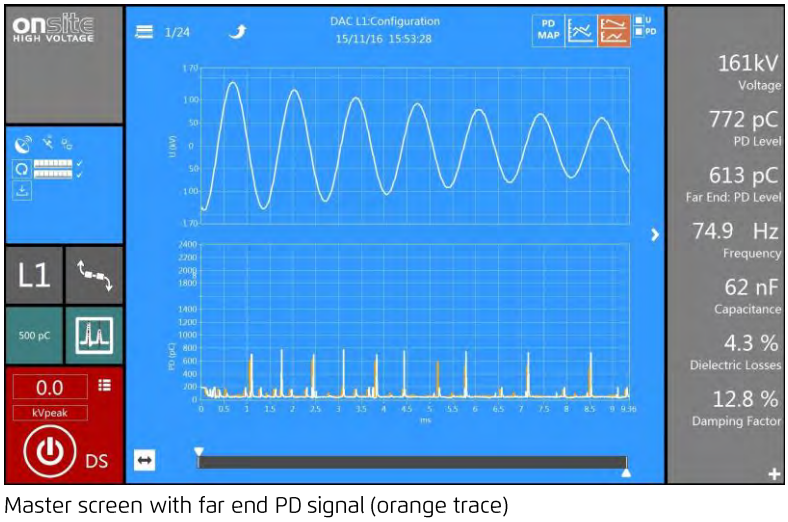
- ✓ Dual side PD testing and diagnosis for long transmission cable circuits
- ✓ Improvement of over-all PD measurement performance up to 200 %
- ✓ Highly sensitive PD measurement with automatic real-time PD localisation
- ✓ Fully integrated advanced PD diagnosis for a complete cable condition picture
- ✓ Simple setup with intelligent intercommunication and synchronisation

The inventor of **realDAC**

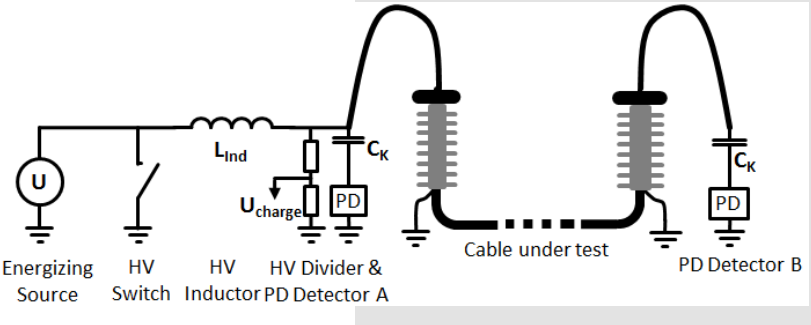
Technical Data DS300

Applicable for DAC HV systems	100 kV_{peak} … 300 kV_{peak}
Frequency range damped AC	10 Hz … 800 Hz
PD measuring range	10 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 resolution	1 pC
PD localisation accuracy	+/- 6 meters
TDR joint localisation in calibration mode	Integrated
Analysis software	DAC Explorer software, comprehensive viewing, processing, analysing and reporting of measurement data
Power supply	Single phase AC 110 … 240 VAC 48 … 63 Hz, 300 VA Optional 12 VD
Ambient temperature (operating)	-25 °C … +65 °C, 95%, non-condensing
Net weight	approx. 70 kg
Dimensions	Ø 780 x H 1750 mm
Flight case	850 x 850 x 1950 mm, 141 kg

Changes to specifications are subject to change without notice



Master screen with far end PD signal (orange trace)



Applications

- Capable of performing all necessary on-site tests and measurements on all types of power cables
- After-laying testing of newly installed or repaired cable systems
- Testing in line with IEC 60840, IEEE 400 and CENELEC HD 632 S2
- 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

- DS300 extends the products line of onsite high voltage DAC solutions
- PD monitored withstand test by applying damped AC (DAC) voltage
- Compatible* with single side DAC systems up to 300 kV_{peak}
- Measurement of PD level, PD inception and PD extinction voltage
- Multiple PD spot localisation in cable insulation and accessories
- Phase resolved PD analysis
- The solution consists of a DAC HV master* unit and a DS300 unit and all needed connection cables
- The DAC HV master* unit controls fully automatic the complete measurement setup as a single appliance

* Master DAC unit need "ds" option

onsite high voltage group
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