

## DOBLE OFF-LINE TESTING & ASSESSMENT

# M7100™

High-Voltage Asset Analyzer

### THE MOST-COMPREHENSIVE SOLUTION FOR COMMISSIONING, DIAGNOSTIC AND SCHEDULED MAINTENANCE TESTING

The Doble M7100 High-Voltage Asset Analyzer is your complete solution for high voltage testing. With an intuitive design and patented dual high-voltage leads, the M7100 greatly reduces the number of ladder trips technicians are exposed to per job—sometimes cutting the number to nearly one third. This significantly improves the safety and quality of field work by limiting exposure to the workforce and reducing errors.

The M7100 automates multiple tests, previously performed by several pieces of equipment, cutting down testing time from seven hours to one and a half hours. By dramatically reducing testing time, you can now maximize outage periods by performing more maintenance during the hours previously devoted to testing.

#### FEATURES

- Built-in Low Voltage/High Current Multi-Frequency Source
- Combined Source and Measurement Test Leads
- True 4-Terminal measurements
- Intuitive design where the color or number is the connection
- Patented dual high-voltage leads that allow you to switch between Source and Measurement—both capabilities are within each HV lead
- Enhanced safety features include new safety switch design

#### BENEFITS

- Finish testing in a third of the time
- Maximize your outages and limit safety risk
- Replace a truck full of instruments and cables
- Greatly reduce the number of ladder trips technicians are exposed to per job



SUPPORTED STANDARDS	
NETA	2011 Maintenance 7.2.2
	2007 Acceptance 7.19.2
IEEE	C57.152
	C57.13
	C57.13.6
	C57.19.01
	286
IEC	60076-1
	60137
	61850-9-2-Ed.2 B
IEC/TR	60894

TEST CAPABILITIES
Power Factor/Tan Delta
Variable Frequency Power Factor/Tan Delta
Demagnetization Feature
3 Phase Turns Ratio
10 kV Turns Ratio
Leakage Reactance (1 $\emptyset$ , 3 $\emptyset$ )
3 Phase Winding DC Resistance
3 Phase 10kV (Single Phase) Exciting Current and Loss

FUTURE ENHANCEMENTS
OLTC Dynamic Resistance Measurement (DRM)
External Reference
Capacitor Bank
Primary Injection
$\mu\Omega$ Meter

INCLUDED ACCESSORIES	
SYSTEM CABLES	
Type	Quantity
High Voltage Cables	2
Low Voltage Cables (Red, Blue, Yellow, Black)	4
Measurement Cables (Red, Blue, Yellow)	3
Ground Lead (Copper)	1
OLTC Control Cable	1
USB Cable	1
Ethernet Cable	1
AC Power Cord	1
External Temperature & Humidity Module w/Cable	1
External LED Strobe Lamp w/Cable	1
8' (2.4M) Integrated Safety Switch/Cable	1
65' (19.8M) Integrated Safety Switch/Cable	1
Doble Bushing Tap Adapters	4
Hot Collar Straps	7
5 ft Copper Jumpers	5

OPTIONAL ACCESSORIES
M7 Truck
MFL Liquid Insulation Test Cell
Type C Resonator (Up to 12 kV)
Doble Universal Controller (DUC)
IEC 61850 Adapter Kit <i>Coming in 2017</i>
M140 Capacitor Bank Kit <i>Coming in 2017</i>
M110 DC AMP <i>Coming in 2017</i>
M120 AC AMP <i>Coming in 2017</i>



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Specifications are subject to change without notice.  
 Doble is ISO certified.  
 Doble is an ESCO Technologies Company.  
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