DET4TC2 and DET4TCR2
Digital Ground Testers

- IP54 rated
- 2, 3 and 4 point testing
- Attached Rod Technique (ART)
- Stakeless measurements
- User selectable test frequency
- Dry cell or rechargeable versions
- User selectable output voltage
- Simple one button operation
- Robust carry case
- Backlit display
- Delivered with calibration certificate

DESCRIPTION

Megger's DET4 family of ground testing instruments offers a comprehensive solution to your ground stake and soil resistivity testing needs. The standard instrument comes with test leads, stakes, terminal adaptors for bare wire, batteries and calibration certificate are delivered in a tough carry case which has space to accommodate all the instrument accessories - everything you need to start testing in one kit.

The DET4TC2 and DET4TCR2 are designed for extended temperature range use with an IP54 rated enclosure making them genuinely outdoor instruments. The instrument provides all the functions required for ground system testing: variable frequency 2 pole, 3 pole, 4 pole, Attached Rod Technique (ART), stakeless, leakage current and ground noise voltage measurement.

The instrument is easy to use with a large rotary selector switch and one-press test button, both of which permit operation with gloved hands. Unlike some instruments, the design negates the need for a shorting link when making two pole measurements. There are no hidden functions with the instrument: clearly labelled auxiliary controls are used to select the test frequency (94 Hz, 105 Hz, 111 Hz and 128 Hz), output voltage (50 V or 25 V where local standards apply) and to switch the backlight on or off.

The optional MCC CLAMP augments the traditional fall-of-potential measurement method with ART (Attached Rod Technique) which allows electrode testing without disconnection and also leakage current measurements down to 1 mA. A second optional clamp, the MVC CLAMP, enables true stakeless measurements to be made in situations where driving stakes is not practical.

The clear, easy-to-read display provides excellent contrast and viewing angle making the instrument ideally suited to outdoor use. The display is backlit, extending the operational environment of the instrument to cable cellars and other dark locations.

The instrument offers a wide measurement range of 0.01 Ω a to 20 kΩ, ground noise voltage measurement from 1 V to 100 V and ground current from 1 mA to 20 A. Accurate results can be obtained in electrically noisy environments since the instrument is capable of rejecting noise voltages of 40 V peak to peak and the user can select different test frequencies to minimise the effect of interference.

The DET4TC2 digital ground tester is powered from 8 AA batteries which are widely available and deliver excellent testing time. The DET4TCR2 is powered from rechargeable AA cells. The battery charger is built in and the instrument is supplied with an AC/DC adaptor. For both instruments, the battery status is display using a bar-graph.

The Megger ground testers comply with stringent safety standards and are rated to 100 V CAT IV. They also have selectable 25 V or 50 V output for compliance with IEC 61557-5.

DET4TC2 and DET4TCR2
Digital Ground Testers

SPECIFICATIONS

Ingress protection	IP54
C stake, P stake and Noise check	Automatic
Noise rejection	40 V pk to pk
2-wire, 3-wire, 4-wire test	Yes, no shorting links required
No disconnect testing (ART)	Yes, with MCC CLAMP
Stakeless measurement	Yes, with MCC CLAMP and MVC CLAMP
Instrument output Voltage:	±25 V or ±50 V at 94 Hz, 105 Hz, 111 Hz and 128 Hz
Current:	4.5 mA or 0.45 mA or 0.045 mA
Ground current range with clamp	0.5 mA to 19.9 A
Ground current accuracy	5% ±3 digits
Ground voltage range	0 to 100 V AC
Ground voltage accuracy	2% ±2 V

Resistance ranges

2, 3, 4 pole:	0.01 Ω to 20 kΩ
ART:	0.01 Ω to 200 kΩ
Stakeless:	0.01 Ω to 200 Ω

Resistance accuracy

2P measurements:	2% ±3 digits
3P measurements:	2% ±3 digits
4P measurements:	2% ±3 digits
ART measurements:	5% ±3 digits
Stakeless measurements:	7% ±3 digits

Maximum probe resistance

Rp limit:	200 kΩ (50 V output voltage)
Rc limit:	200 kΩ (50 V output voltage)

Limits reduced to 100 kΩ for 25 V output voltage

Limits reduced to 5 kΩ for 0.01 Ω resolution

Display	3.5 digit high contrast liquid crystal, backlit
Battery type	
DET4TC2:	8 off AA (LR6) cells
DET4TCR2:	8 off AA (LR6) NiMH rechargeable cells
Operating temperature range	-15 °C to +55 °C / 5 °F to 131 °F
Storage temperature range	-40 °C to +70 °C / -40 °F to 158 °F
Dimensions	203 mm x 148 mm x 78 mm (8 in x 5.8 in x 3 in)
Weight	1kg (2.2lb)

Safety

Complies with the requirements of IEC61010-1 100V CAT IV between terminal pairs.*

EMC

In accordance with IEC61326-1

Standards Compliance

Complies with the requirements of KEMA K85B

Complies with the following parts of EN61557, "Electrical safety in low voltage distribution systems up to 1000 V AC and 1500 V DC - Equipment for testing, measuring or monitoring of protective measures".

Part 1 - General requirements

Part 5 - Resistance to earth

*The CAT IV 100 V rating is dependant on the use of a leadset of at least this rating, for example the optional two wire leadset part number 1001-858.

DET4TC2 and DET4TCR2
Digital Ground Testers

ORDERING INFORMATION

Description	Part number
DET4TC2	1000-345
DET4TCR2 (rechargeable)	1000-346
Included Accessories	
Hard carry case	
Stake and wire kit (15 m, 10 m, 10 m, 3 m)	
Right angle terminal adaptors (to connect bare wires to terminals)	
External AC/DC charger (DET4TCR2 only)	
Kitted options for ART and Stakeless testing	
DET4TC2 + clamps	1000-365
DET4TCR2 + clamps (rechargeable)	1000-366
"+ clamps" included Accessories	
Hard carry case	
Stake and wire kit (15 m, 10 m, 10 m, 3 m)	
MCC CLAMP (for ART testing)	
MVC CLAMP (adds stakeless testing)	
Field calibration check for instrument and CLAMPS	
Right angle terminal adaptors (to connect bare wires to terminals)	
External AC/DC charger (DET4TCR2 only)	
Professional kitted options for ART and Stakeless testing	
DET4TC2 + ETK50C	1012-521
DET4TCR2 + ETK50C	1012-523
"+ kit" included Accessories	
Hard carry case	
Stake and wire kit (15 m, 10 m, 10 m, 3 m)	
MCC CLAMP (for ART testing)	
MVC CLAMP (adds stakeless testing)	
Field calibration check for instrument and CLAMPS	
External AC/DC charger (DET4TCR2 only)	
Separate ETK50C 2x 50m, 2x 30m complete with spikes and tape measure in weather proof holdall	

Description	Part number
Accessories	
Replacement hard carry case	5410-429
Replacement calibration check PCB (two-clamp measurements)	1000-434
Replacement ground test stakes (x2) for included kit (200 mm, 8 mm dia)	6220-804
Replacement ground test leads (x4) for included kit (15 m, 10 m, 10 m, 3 m)	6220-806
Replacement cable reel (50 m, red + spike)	1010-844
Replacement cable reel (30 m, black + spike)	1010-848
Replacement cable reel (50 m, yellow + spike)	1010-842
Replacement cable reel (30 m, green + spike)	1010-849
Replacement external AC/DC adaptor (DET4TCR2 only)	6280-370
MCC CLAMP	1010-516
MVC CLAMP	1010-518
Calibration check box (25 Ohm)	1000-435
Right angle terminal adaptor set	1012-511
Black crocodile clip (1)	6220-850
"Getting down to earth" Megger guide to earth ground testing	21500-072
Leadset	1001-858

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DET4TC2_DET4TCR2_DS_EN_V14

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ISO 9001
The word 'Megger' is a registered trademark

Megger®

Diensten van EURO-INDEX

EURO-INDEX is fabrikant van BLAUWE LIJN en importeur/distributeur van diverse A-merken test- en meetinstrumenten. Wij leveren naast instrumenten ook de diensten om het gebruik hiervan in uw bedrijfsvoering te optimaliseren. Dit omvat uiteraard onderhoud, reparatie en kalibratie van instrumenten, maar ook kennisdeling via de EURO-INDEX Academy en verhuur van meetinstrumenten.

Geautoriseerd Service Centrum

EURO-INDEX is van de meeste merken in ons assortiment een Geautoriseerd Service Centrum. Dit betekent dat uw instrumenten worden behandeld door technici die zijn opgeleid door de fabrikant en beschikken over de juiste gereedschappen en software. Er worden uitsluitend originele onderdelen toegepast en de garantie van uw instrument blijft intact, net als de certificering (ATEX, EN50379, etc.).

Kalibratielaboratorium

Ons moderne service- en kalibratielaboratorium beschikt over een RvA accreditatie naar NEN-EN-ISO/IEC 17025. Deze accreditatie geldt voor grootheden, zoals gespecificeerd in de scope bij accreditatienummer K105.

Meer info

Kijk voor een overzicht van al onze diensten op euro-index.nl/diensten

KWS®

KWS® is een unieke kalibratieformule voor uw test- en meetinstrumenten met periodiek onderhoud en kalibratie tegen vaste, lage kosten.
Uw kalibratiecertificaten zijn digitaal beschikbaar via Mijn KWS (gratis webportaal en app) en door de QR-code te scannen van de kalibratiesticker op het instrument.

Meer info

Verhuur van meetinstrumenten

Er zijn diverse situaties waarbij huren handig is:

- U heeft tijdelijk extra toestellen nodig.
- Uw eigen meetinstrument wordt onderhouden en/of gekalibreerd.
- U moet een eenmalige meting verrichten.

Meer info

EURO-INDEX Academy

- Trainingen (individueel en klassikaal)
- Cursussen, infosessies en workshops
- Demonstratie- en instructievideo's
- Whitepapers

Meer info

Servicebalie

Onderhoud, reparatie en kalibratie

Cursussen en workshops

Kalibratielaboratorium

Wijzigingen voorbehouden EURO-INDEX® NL 26006

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