INLEC.COM

DATASHEET

Nationwide Low Call
0333 6000 600

WHY BUY
WHEN YOU CAN HIRE

FLUKE
networks.

DTX CableAnalyzer™ significantly reduces your total time to certify.

The new DTX CableAnalyzer™ Series from Fluke Networks is the testing platform for today – and tomorrow. This revolutionary new platform significantly reduces total time to certify by improving every aspect of the testing process. It all starts with a Cat 6 Autotest time that's three times faster than other testers – and fiber testing that's five times faster. But that's just the beginning. DTX also gives you Level IV Accuracy, unmatched troubleshooting diagnostics, 900 MHz of testing bandwidth, 12-hour battery life, and nearly instant setup and reporting. With the DTX, you're ready for whatever the world throws at you – today and tomorrow.

DTX CableAnalyzer™
It's all about time.

The DTX advantage: speed and accuracy.

The DTX CableAnalyzer's powerful features, speed, and superior accuracy make your crews more efficient and productive – and you can see the results on the bottom line. It's all about time – and no other tester delivers like DTX.

- **Increase productivity from day one.** Intuitive interface means your techs spend less time in training and more time testing.

- **Zero to certified in 12 seconds.** This unheard-of Cat 6 test speed lets you move from link to link three times faster than with previous testers.

- **Level IV Accuracy.** Get the most accurate test results in the shortest possible time.

- **900 MHz frequency range.** Prepares you for future applications, such as 10 Gigabit Ethernet, Class F and CATV.

- **Advanced time-saving diagnostics.** Pinpoints the location of a failure and is the only tester that suggests corrective action, saving trouble-shooting time.

- **Record-fast fiber certification.** Certifies a pair of fibers in 12 seconds with DTX singlemode and multimode fiber modules.

- **12-hour battery life.** Gives you the power to complete any job.

- **Save time managing results.** From setup to reporting, LinkWare™ Cable Test Management Software's simple user interface and time-saving features increase productivity.

Significantly reduces total time to certify.

The DTX Digital CableAnalyzer Series gives you a complete solution that streamlines every aspect of the certification job – from setup, to record-fast testing and troubleshooting, to reporting results to the customer. All told, DTX can save you considerable time and money – up to four hours a day.
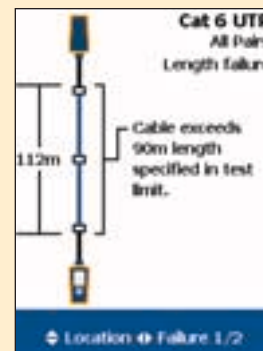
Cat 6 certification in 12 seconds

The DTX-1200 and DTX-1800 perform Cat 6 certification tests in just 12 seconds – in full compliance with industry standards and with superior accuracy. That's *three times faster* than existing testers. This incredible speed means you can test up to 170 more links in an eight-hour shift.

Troubleshoot faults twice as fast

When a link fails, the DTX Series provides quick, easy-to-understand directions to identify the point of failure (distance from the tester) and the possible reason(s) for the failure.
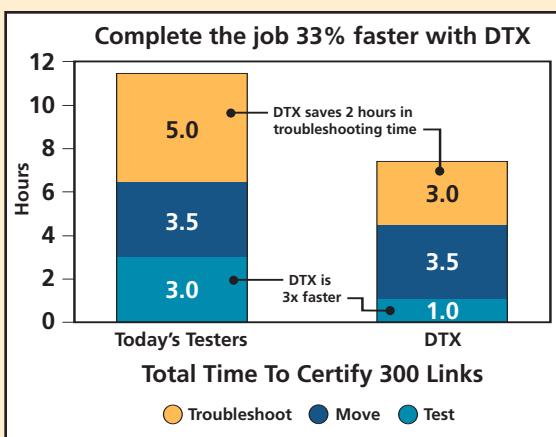
These directions not only tell you the problem, but also *identify corrective actions* your test technicians can take to solve the problem quickly – all without having to consult the project manager. Instead of spending time executing trial and error corrections – and re-testing to find out

Cat 6 UTP
All Pairs
Length failure

112m — Cable exceeds 90m length specified in test limit.

Location Failure 1/2

whether the problem has been resolved – the technician knows exactly where to look and what to do to fix the failing link. *Even if only two percent of the cables certified in one shift fail Autotest, you'll save as much as two hours of labor time per day of certifying.*

Fast even when you're not testing

The DTX Series isn't just a faster way to test. It cuts setup and reporting times. Its ease-of-use lowers training time. Extended battery life means you can do more on a single charge. And a bright color display, ample memory, and built-in talk set all contribute to overall productivity while enhancing the user experience. **This all adds up to save you time and money every day.**

Complete the job 33% faster with DTX

Total Time To Certify 300 Links

Hours

Today's Testers	DTX
5.0 (Troubleshoot)	3.0 (Troubleshoot)
3.5 (Move)	3.5 (Move)
3.0 (Test)	1.0 (Test)

DTX saves 2 hours in troubleshooting time

DTX is 3x faster

● Troubleshoot ● Move ● Test

The DTX CableAnalzyer:
a visionary approach to testing.

Level IV Accuracy – Exceeds spec requirements for Cat 6 and beyond.

Fiber ready at all times – optional fiber modules fit snug and protected in DTX module cavity.

Advanced time-saving diagnostics pinpoint problems anywhere on the link and suggest corrective action to help you get the job done on time.

Field tough Permanent Link Adapter delivers repeatable accuracy and Cat 6 interoperability.

12-hour battery life – Lithium ion battery provides full day of testing.

Internal memory stores up to 250 graphical Cat 6 test results or up to 2000 reports in text format.

Memory Card for instant data hand-off – each multiple of 16 MB stores 300 Cat 6 graphical link test results.

Bandwidth support to 900 MHz – supports video distribution, Class F, and 10 Gigabit Ethernet.

12-second Cat 6 Autotest – speeds you through testing three times faster than any other tester.

Large color display with bright backlight for easy viewing.

12-second fiber Autotest – performs dual fiber, dual-wavelength certification test.

Save full graphical test results to Fluke Networks' LinkWare PC software.

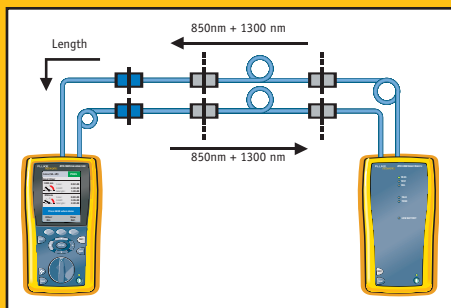**USB Port** for high-speed test data downloads.

Portable, lightweight ergonomic design for easy field use.

Rotary knob makes learning easy and operation simple – you always know what test mode is selected.

Talk feature saves time by allowing you to communicate with your test partner at the other end of the link over both copper and fiber.

Rugged overmold bonded to case stands up to tough field conditions.

FLUKE networks   DTX-1800 CableAnalyzer

Summary   PASS
Wire Map
Resistance
Propagation Delay
Delay Skew
Insertion Loss
NEXT
ELFEXT
Return Loss

Highlight items,
Press ENTER

Page Up   Page Down

Get more done in less time with fiber on-board.

Record-fast fiber certification

The DTX fiber modules accelerate testing through exclusive technology and an easy-to-use interface. Press the Autotest button and you get standards compliant certification automatically – test two fibers, each at two wavelengths, measure length, and determine the pass or fail status – all in about 12 seconds. Our fiber modules let you test more fibers in less time, cutting testing costs and freeing you up for other tasks. You can easily save more than 100 hours per year.

*Unlike competitive fiber adapters which measure length and **two** loss measurements per Autotest, DTX is the only fiber test solution that measures length and **four** loss measurements per Autotest – all in about 12 seconds. With DTX Fiber Modules you can speed through fiber testing five times faster than the competition.*

Test copper and fiber with a touch of a button

Only the DTX platform offers optional on-board fiber modules – so you'll never lose time searching for your fiber adapter. And fiber certification is always ready when you are. No other solution lets you switch between copper and fiber with a touch of a button.

Certify multimode and singlemode fiber

DTX fiber modules use LED and laser sources to ensure standards-compliant certification. Save, upload, manage, and print comprehensive certification reports using LinkWare PC software.

Deliver complete Tier 1 certification

Our comprehensive Tier 1 certification solution includes loss, length, and polarity measurements. You can validate fiber link performance and installation quality. Measure optical loss at multiple wavelengths. Measure fiber length and verify polarity. And bi-directionally test fibers at two wavelengths without swapping near and far-end units.

Find faults faster

An integrated on-module visual fault locator (VFL) makes troubleshooting simple link problems fast and incredibly easy. The bright laser-driven VFL helps you locate many near-end fiber faults and can be used to verify continuity and polarity. Our exclusive integrated design ensures that the VFL is always on-hand when you need it.

900 MHz frequency for a future-proof investment

The top-of-the-line DTX CableAnalyzer – the DTX-1800 – supports testing up to 900 MHz. This extended bandwidth supports the ISO Class F links, as well as emerging standards like 10 Gigabit Ethernet over twisted-pair cabling. It also enables you to certify links for other applications, such as video distribution over twisted-pair cabling. No other tester on the market gives you this kind of future-proof investment while meeting current Cat 5e/6 specifications.

Accuracy every time, over time

The DTX Series testers are more accurate than any cable certification tester on the market today. Overall accuracy is a function of two critical factors: tester accuracy level – which assures that the tester delivers the correct PASS/FAIL results – and Permanent Link adapter technology, which is also a function of the quality and characteristics of the test adapters that interface to the link-under-test.
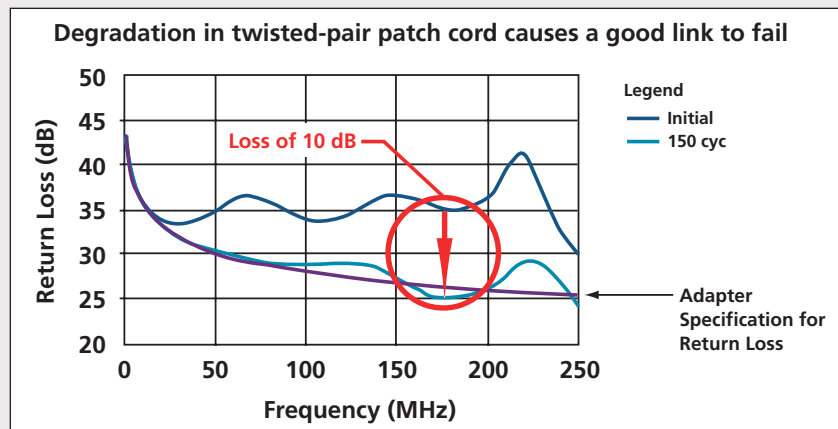
Tester accuracy exceeds Level IV

Until now, testers have been designed to meet accuracy Level III. The more demanding accuracy Level IV specification has been proposed in ISO/IEC (international standards) to test Class F links to 600 MHz. DTX testers exceed this new specification, assuring you of higher confidence in results over the full frequency range.

Permanent Link adapter technology eliminates false failures

Commercial patch cords – including Cat 5e/6 and Cat 7 – used in Permanent Link testing applications can cause costly false failures by failing a good link and adding unnecessary hours of troubleshooting and repeat testing. The daily wear associated with coiling, uncoiling, and storing patch cords under rough field conditions causes invisible degradation over time and contributes to Return Loss, which is often the cause of a FAIL.

At Fluke Networks, we put accuracy first. That's why we developed high-performance Permanent Link Adapters instead of using commercial patch cords. Our proprietary technology ensures superior accuracy and stability required for measuring Return Loss, while increasing the accuracy of all other measured test parameters – **not just accuracy one time, but accuracy every time – over time.**

Degradation in twisted-pair patch cord causes a good link to fail

Return Loss (dB) vs Frequency (MHz)

Loss of 10 dB

Legend
— Initial
— 150 cyc

Adapter Specification for Return Loss

As you can see in this graph, a commercial Cat 7 SSTP cord has a 10 dB loss after 150 cycles of coiling and uncoiling. This 10 dB degradation causes a good link to fail – and you end up with a false fail. This 10 dB of loss won't occur when you use Fluke Networks' Permanent Link adapter technology – with DTX you get repeatable accuracy you can count on.

	Link meets spec	Link does not meet spec
Pass	OK	"False" Pass How much does a call back cost?
Fail	"False" Fail Unnecessary troubleshooting and re-testing time	OK

Test Results

The cost of inaccuracy: *A tester showing incorrect Pass/Fail decision may cause a good link to fail (false fail) or a bad link to pass (false pass). Both of these false results cost you time and money.*

FLUKE
networks®

Time is money. DTX saves you both.

The DTX CableAnalyzer Series delivers superior performance that can reduce your total certification costs by as much as 33% per year. This dramatic reduction is the result of not just faster testing, but also improved accuracy, superior diagnostics, longer battery life, simple user interface, and fast setup and reporting.
DTX – it's all about time.

DTX CableAnalyzer Series

Product Features	DTX-1800	DTX-1200	DTX-LT
Cat 6 Autotest time (seconds)	12	12	30
Maximum bandwidth (MHz)	900	350	350
Accuracy level	IV	IV	IV
Color display	•	•	•
Stores graphical results data	•	•	•
Internal memory capacity (graphical Cat 6)	250	250	250
Removable memory card interface Cat 6 graphical results for each of 16 MB multiple	300	300	n/a
Lithium ion batteries – battery life	12 hours	12 hours	12 hours
Advanced diagnostics	•	•	•
USB interface	•	•	•
Serial interface	•	•	n/a
Cat 6 permanent link adapter	•	•	•
Cat 6 channel adapter	•	•	option
Accepts resident fiber module	•	•	•
Start autotest at smart remote	•	•	•
Talk between main and smart remote	•	•	•
Standard Accessories			
Fiber Test Module (multimode or singlemode)	option	option	option
Cat 7 permanent link adapter	option	n/a	n/a
Cat 7 channel adapter	option	n/a	n/a
Multimedia memory card	•	option	n/a
USB cable	•	•	•
Serial computer interface cable	•	option	n/a
Talk headset	•	•	option
Carrying case	•	•	•

Note: • Feature or accessory is available in the standard product configuration.
n/a The feature is not available; the accessory is not applicable.
option The accessory can be purchased as an optional item.

The DTX Series future-proofs your investment giving you a clear and simple upgrade path from any of the models to any higher performance model, including the DTX-1800.

Experience the power of DTX.

We invite you to experience the unique capabilities of our DTX CableAnalyzer by taking a virtual test drive at **www.flukenetworks.com/DTXlive**.

Or in the U.S. and Canada, call us at **1-800-508-0490** and let a Fluke Networks Systems Engineer show you how DTX technology can work for you. Other countries, visit **www.flukenetworks.com/contact** for a sales organization near you. You can also sign up for a free half-day workshop covering the latest in testing and standards overview, DTX product demonstration, and hands-on operation. To find a workshop in your area, go to **www.flukenetworks.com/workshops.**

The DTX Series from Fluke Networks. The revolutionary platform that significantly reduces total time to certify – today and tomorrow.

Enhance your DTX tester with service, support, and training.

Register your DTX and receive a bonus gift. Plus access to our Technical Assistance Center (TAC) and extensive on-line Knowledge Base for fast answers. Register today at **www.flukenetworks.com/register**

Customer Support is easy with our NetworkSuperVision™ Gold Support. It ensures peace-of-mind with free annual calibration, free loaner units, 24/7 TAC support and special discounts on training and promotions. See **www.flukenetworks.com/goldsupport** for more information. Or contact your country sales organization for Gold program availability and pricing.

Train your installers at our one-day CCTT training and certification program. This BICSI-accredited course includes classroom training, hands-on labs, and exam certification exercises. Visit **www.flukenteworks.com/CCTT** for more information. Or contact the country sales organization nearest you for availability.

N E T W O R K S U P E R V I S I O N

DTX Fiber Modules

With today's demands on high-speed data networks containing both fiber optic and twisted-pair cabling, it's more important than ever to certify and document multiple media types to ensure a properly executed installation.

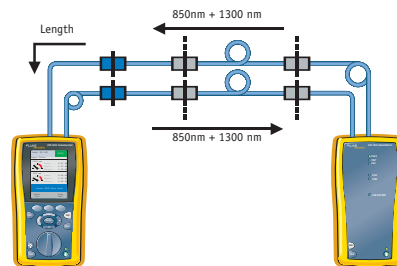Now you can accurately certify copper and fiber with the new DTX CableAnalyzer™. Only the DTX Series offers optional on-board fiber modules. More convenient and powerful than other fiber optic test solutions, these modules enhance certification and troubleshooting with two-fiber, dual-wavelength testing and an integrated Visual Fault Locator (VFL). And no other solution lets you switch between copper and fiber with a touch of a button. Not only can you certify both media types, but you can do it faster and more efficiently than you ever imagined.

The DTX fiber advantage:
- Fiber on-board when you need it
- Five times faster than existing testers with 12-second Autotest
- Delivers Tier 1 LinkWare fiber certification reports
- Optimized for applications ranging from 10 Mb/s to 10 Gb/s
- Locates fibers, verifies continuity and polarity, and finds breaks with built-in VFL
- Speeds testing with TALK, FINDFIBER, MONITOR, bi-directional and single fiber test features
- Supports multiple SFF (small form factor) fiber connectors

Record-fast fiber certification

We engineered the DTX Fiber Modules to accelerate testing through exclusive technology and an easy-to-use interface. Press the Autotest button and automatically test two fibers, each at two wavelengths, measure length, and determine pass or fail status – all in about 12 seconds. Our fiber modules let you test more fibers in less time, minimizing testing costs and freeing

Length

850nm + 1300 nm

850nm + 1300 nm

Unlike competitive fiber adapters which measure length and *two* loss measurements per Autotest, DTX is the only fiber test solution that measures length and *four* loss measurements per Autotest – all in about 12 seconds. With DTX Fiber Modules, you can speed through fiber testing five times faster than the competition.

you up for other tasks. Over time, the savings are substantial – easily more than 100 hours per year.

Test copper and fiber with a touch of a button

Only the DTX platform offers optional on-board fiber modules. Never lose time searching for your fiber adapter. Fiber certification is always resident and ready when you are.

Deliver complete Tier 1 certification

DTX fiber modules provide a complete Tier 1 certification solution – loss, length and polarity. Validate fiber link performance and installation quality. Measure optical loss at multiple wavelengths, measure fiber length and verify polarity. You can bi-directionally test two fibers at two wavelengths with incredible speed without swapping main and remote units, a capability only available from Fluke Networks.

Enhance your DTX Series CableAnalyzer™ with vision into fiber link performance.

Selected Specifications*

Optical Specifications (23°C)	
Input (Meter) connectors	Removeable adapter on fiber optic power meter (input port). Removable SC adapter standard with product. Optional removable adapters: LC, ST and FC
Output (Source) connectors	Fixed SC adapter
Source type and nominal wavelength	DTX-MFM2: 850 nm LED and 1300 nm LED DTX-GFM2: 850 nm VCSEL and 1310 nm FP laser DTX-SFM2: 1310 nm FP laser and 1550 nm FP laser
Source power	DTX-MFM2: ≥ -20 dBm, DTX-SFM2: ≥ -7 dBm
Length measurement	DTX-MFM2: ≤ 5,000 m of 62.5 or 50 µm fiber DTX-GFM2: ≤ 5,000 m of 62.5 or 50 µm fiber DTX-SFM2: ≤ 10,000 m of 9 µm singlemode fiber
Power meter type	InGaAs detector
Power measurement range	0 to -60 dBm (1310 nm and 1550 nm) 0 to -52 dBm (850 nm)
VFL Specifications (23°C)	
Laser type and nominal wavelength	Class II CDRH, 650 nm
Output modes	Continuous wave and flashing mode
Connector adapter	2.5 mm universal
Environmental Specifications	
Operating temperature	0°C to 40°C
Storage temperature	-20°C to 60°C
Safety	CE, CSA, EN 61010-1
General Specifications	
Dimensions (L x W x D), nominal	4.2" x 3.0" x 1.1" (106 mm x 76 mm x 28 mm)
Weight, nominal	0.31 lb (0.14 kg)

* Visit flukenetworks.com/dtxfm for complete specifications.

Ordering Information

Models	Descriptions
DTX-MFM2	**Set of two DTX Multimode Fiber Modules, each incorporating:** • 850 nm and 1300 nm LED sources combined into a single output port • 850/1300/1310/1550 nm power meter • Integrated VFL
DTX-GFM2	**Set of two DTX Gigabit Multimode fiber modules, each incorporating:** • 850 nm VCSEL and 1310 nm laser sources combined into a single output port • 850/1300/1310/1550 nm power meter • Integrated VFL
DTX-SFM2	**Set of two DTX Singlemode Fiber Modules, each incorporating:** • 1310 nm and 1550 nm laser sources combined into a single output port • 850/1300/1310/1550 nm power meter • Integrated VFL
NFB1/2-LC&ST	**Adapter kit -** containing all Test Reference Cords to test 62.5 and 50 µm fiber installations using LC, ST
GLD-DTX-FIBERMOD	**DTX Fiber Module Gold Support** Gold SuperVision ensures peace-of-mind with free annual calibration, free loaner units, 24/7 TAC, and special discounts on training and promotions.

Certify multimode and singlemode fiber

Your network may contain both multimode or singlemode fiber types. Our LED modules and laser modules ensure standards-compliant certification. Our VCSEL/LD module qualifies the link for 1 or 10 Gigabit Ethernet use. Save, upload, manage and print comprehensive certification reports using Fluke Networks LinkWare™ PC software.

Find faults faster

Use the integrated on-module visual fault locator (VFL) to troubleshoot simple link problems. The bright laser-driven VFL helps you visually locate many near-end fiber faults, and is useful for continuity and polarity verification. Our exclusive integrated design ensures that the VFL is always on-hand when you need it.

Fluke Networks delivers Network SuperVision

Fluke Networks is committed to providing innovative Network SuperVision Solutions™ for testing and certifying copper and fiber cabling systems. Simply add these powerful modules to your DTX CableAnalyzer to certify, troubleshoot and document your fiber installations – today and tomorrow – with one compact field tester.
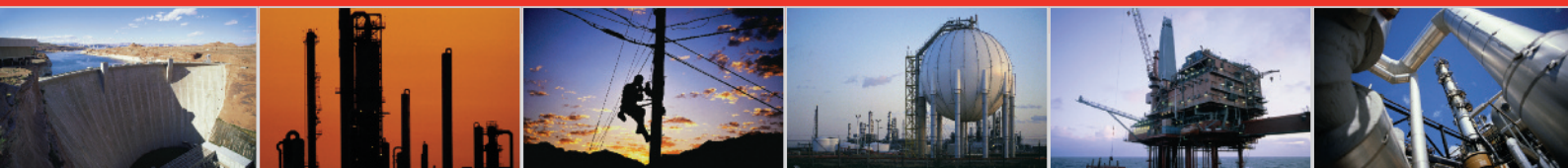
NETWORKSUPERVISION

INLEC, supporting you to deliver a world class service, every day, in every sector ...

OUR COMMITMENT TO YOU

A wealth of knowledge and experience.

You can take advantage of expert advice to ensure you get the best, most appropriate and cost effective equipment for the job. We supply a wide variety of industries, so if there is another way to do the job or save you time and money we'll pass on the benefit of our experience for free.

Honest advice, just a phone call away.

If we don't have a particular item, rather than hiring you something that won't do the job, we would rather direct you to an alternative supplier. You will always be provided with full instructions and if you still need help, call our technical team on Nationwide Low Call 0333 6000 600. Our aim is to save you time, frustration and money.

Top quality equipment from major manufacturers.

With Inlec you'll get the most accurate, reliable and well-maintained equipment available. Prices are regularly reviewed to ensure you always enjoy the best value for money. We have made a significant investment in test equipment so we ensure that it's well packed to minimise damage and delay.

We really do listen to you.

You won't waste your time contacting Inlec. Every request for equipment is logged and carefully considered. Listening to our customers helps keep our product range up to date and relevant. If you are unhappy about any aspect of our service please let us know so we can put it right.

YOUR 5 WAY GUARANTEE

❶ GUARANTEE SAME DAY DESPATCH

We understand why prompt delivery is important to you. So, if we confirm your order before 3pm, you are guaranteed same day despatch.

❷ OUR PRICE GUARANTEE

Inlec guarantee you real value for money. Our price match policy is simple - if you can hire the same product for less elsewhere, we guarantee to match that price and reduce it by a further 10% of the difference - and still deliver our industry leading technical and customer support.

For full details check our price-match guarantee online

❸ TOP QUALITY GUARANTEED

All equipment is thoroughly checked prior to dispatch to ensure you receive it in full, safe working order. Your shipment will be securely packed and include manufacturer's instructions, accessories or consumables and a valid calibration certificate where appropriate. In addition, Inlec offer a 24 hour replacement service if you decide the equipment is not suitable for your application*.

❹ FRIENDLY, KNOWLEDGEABLE ADVICE GUARANTEED

Inlec are happy to provide you with free advice, from anunbeatable team of experienced, knowledgeable and friendly engineers and hire experts.

❺ YOUR GUARANTEE OF THE BEST CUSTOMER SERVICE

Throughout your hire we will work hard to ensure you enjoy the very best in support and service from Inlec. We guarantee you won't find better service anywhere in the industry.

*subject to availability and conditions

Europe's leading Test Equipment Hire Specialist

Nationwide Low Call 0333 6000 600
Online: www.inlec.com

Inlec UK Ellerbeck Way, Stokesley Business Park, Stokesley N Yorkshire TS9 5JZ United Kingdom

LAB NO. 0535

CERT. NO. GB93/1773