



HTM-121

**Handheld Digital
Teslameter
with HHP-101
Hall Effect Probe**

Made in New Zealand

Group3 Technology Ltd.

1/527B Rosebank Road, Avondale
Auckland 1026, New Zealand

PO Box 71-111, Rosebank, Auckland 1348, New Zealand

Phone: +64 9 828 3358

Fax: +64 9 828 3357

Email: sales@group3technology.com

Web: <http://www.group3technology.com>

Calibration/Repair: www.group3technology.com/service

Specifications of HTM-121 Teslameter and HHP-101 Probe

Teslameter Model HTM-121

Material:	Anodized, Black aluminum shell
Keypad:	Tactile
Display:	OLED, with large field reading, temperature, and battery level and charging indicator
Operating Unit:	Gauss or Tesla
Temperature:	°C or °F
Dimensions:	207 x 103 x 60mm
Weight (Net):	0.8Kg, 1.5Kg (with carry case)

Probe Model HHP-101

Material:	Solid-state GaAs-material sensor
Active Area:	0.2 x 0.2mm
Cross- section:	131 long x 6.2 wide x 1.1mm thick
Total Length:	250mm
Sensor Position:	3.0mm from center of active area to end of probe
Cable length:	1.5 meters (standard)

Output:

Basic Accuracy:	± 0.5% of full scale (combined contribution of probe and teslameter)
Measurement Rate:	60 Readings per second

Operating Conditions:

Magnetic Field:	bipolar field range, calibrated up to ±2.2T
Temperature:	-5°C to 50°C

Battery Life:	Battery Life of approx. 20 hours at full charge (Battery discharge rate approx. 5% per hour if continuously ON)
----------------------	---

Features:

- Independently Calibrated Teslameter & Hall Probe **up to ±2.2T**
- Data logging via LabView VI
- HHP-101 Probes can be interchangeable to any HTM-121 Teslameter
- Calibration factors of the probe is stored in an SPI EEPROM inside the probe handle.

Power Input Requirement:

- 5VDC, Rechargeable 2 x AA Ni-MH batteries via USB 2.0 port providing a capacity of 2500mAh.

Supplied Accessories:

- USB cable for charging & data communication
- LabView Runtime Version and VI Supplied
- HHP-101 Hall Effect Probe
- Hardshell Carry Case

Enclosure**HTM Teslameter:**

- Anodized, Black aluminum shell, 207 x 103 x 60 mm,

HHP Probe:

- Anodized, Black aluminum case

PERSONAL SAFETY WARNING:

- Be aware of your surroundings when using the probe and teslameter especially in hazardous environment as it may touch live electrical supplies or be caught in moving machinery or objects.
- Ensure you have adequate personal protective equipment when using the instrument.
- Do not use the equipment if the battery is found to be defective nor attempt to open and repair the unit.
- Always practice safe use of equipment.

MAINTENANCE AND CARE FOR HANDHELD TESLAMETER

Proper maintenance and care are essential to ensure the longevity and optimal performance of your Group3 Handheld Teslameter (HTM-121). To maintain measurement accuracy, schedule regular calibrations according to Group3's recommendations for recalibration. Calibration should be performed using the appropriate calibrator designed for the handheld teslameter.

Batteries, USB Port and Probe Port Management

The handheld teslameter is equipped with rechargeable batteries. Regularly monitor the battery level and recharge it as needed using the USB port. To preserve battery life, avoid completely draining the battery before recharging. If the rechargeable batteries, the USB port and the probe port are damaged, do not attempt to repair it yourself. Instead, return the device to the manufacturer for professional repair.

Handling Precautions

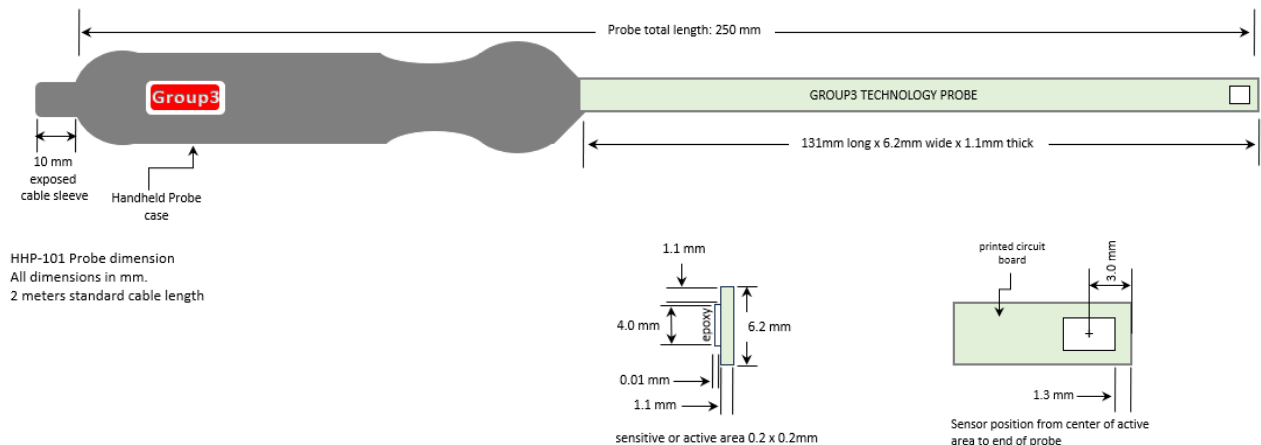
Handle the teslameter with care. Avoid dropping it or subjecting it to strong impacts, as this could impair its functionality and accuracy. If the teslameter experiences a significant impact, it may require factory recalibration and inspection from the Group3 manufacturer.

Do not attempt to open or repair the teslameter independently, as this could void the warranty and compromise its performance. By following these maintenance and care guidelines, you can ensure that your Group3 Handheld Teslameter and Handheld Probe remains reliable, accurate, and ready for use whenever you need it

TROUBLESHOOTING

- **Display shows PROBE MISSING** – when no HHP-101 Hall probe is connected to the HTM.
- **Display shows PROBE OPEN CCT** – Turn off the HTM-121 by pressing the power button or press the Up and Down arrow keys and Enter key into the HTM-121 keypad to RESET the unit or to re-start the unit.
- **Display freezes or hangs up** – Turn off the HTM-121 by pressing the power button.
- **Display shows erroneous data** – If field readings shows abnormality or that readings is different or inconsistent compared to LabView Interface, press the Up and Down arrow keys and Enter key unto the HTM-121 keypad to RESET the unit or to re-start the unit.
- **ALL OTHER ERRORS** – if unit is still misbehaving or not operating correctly after doing a reset, kindly contact Group3 through our website www.group3technology.com/service or email service@group3technology.com for advice.

HHP-101 HANDHELD HALL PROBE



CONNECTING THE HALL PROBE

Before handling the probe, please read the following:

Group3 HHP-101 Hall probe are engineered to deliver a high degree of robustness, particularly for a device of its size and precision. However, it is most important that certain precautions be taken when handling and installing probes so that they are not damaged or destroyed, and to ensure the preservation of its calibration integrity.

Precision and Reliability

The HHP-101 probe is calibrated to deliver precise and consistent measurements when paired with the Group3 Handheld Teslameter (HTM-121). Together, the HHP-101 and HTM-121 offer a $\pm 1.0\%$ full-scale basic accuracy, ensuring that every measurement you take is highly accurate. This level of precision minimizes the margin for error, providing you with dependable data for your critical applications.

Advanced Sensor and Components

At the core of the HHP-101 probe lies an advanced sensor, accompanied by meticulously engineered components. These are specifically chosen to enhance the probe's sensitivity and accuracy. The sensor is designed to detect even the smallest variations in magnetic fields and temperature readings, making the HHP-101 probe ideal for applications where precision is paramount.

Cable Integrity and Handling

The standard probe cable length is 2 meters. The design of the handheld probe ensures that the cable remains free from pinching or other forms of mechanical stress that could compromise its functionality. Proper handling is crucial to maintaining the probe's integrity and performance. Any severe damage to the cable and probe itself will necessitate factory-level repair, replacement, and recalibration.

Compatibility and Usage

The HHP-101 probe is specifically designed to be used with the Group3 Handheld Teslameter HTM-121. Whether the probe is supplied with your teslameter, or it can be obtained separately. Each unit of the handheld probe and teslameter are calibrated to ensure accurate and reliable measurements.

Maintenance and Care

To ensure the longevity and optimal performance of HHP-101 probe, it is essential to handle it with care. Avoid excessive bending or twisting of the cable and protect the probe from harsh environments that could cause damage. In the event of significant damage, do not attempt to open or repair the probe independently, as this could void the warranty and compromise its performance; instead, return it to manufacturer for professional repair and recalibration. To maintain measurement accuracy, schedule regular calibrations according to Group3 manufacturer's recommendations.

LIMITED WARRANTY

1. Standard Limited Warranty

Group3 Technology Limited ("Group3" or the "Company") warrants instruments and other products of its manufacture to be free from defects in materials and workmanship that adversely affect the product's normal functioning under normal use and service for a period of one (1) year from the date of shipment to the original purchaser, unless a longer warranty period is expressly stated by the Company in writing or an eligible Extended Warranty has been purchased.

The obligation of this warranty shall be limited to repairing or replacing, at the discretion of the Company and without charge, any equipment which the Company determines to be defective in materials or workmanship within the applicable warranty period.

Subject to applicable law, the Company will reimburse the lowest reasonable two-way freight charges for any warranted item returned to the Company's factory or to an authorised Group3 distributor or service centre, provided that prior written authorisation for the return has been obtained from the Company.

2. Warranty Exclusions

This Limited Warranty shall not apply to any equipment which the Company determines has become defective or damaged as a result of:

- mishandling or abuse;
- improper installation;
- unauthorised alteration, modification or repair;
- negligence;
- inadequate or improper maintenance;
- incorrect or unintended use;
- operation outside the specifications published by the Company;
- exposure to environmental, electrical, mechanical, magnetic or other conditions exceeding the product's specified operating limits; or
- any other circumstance or use not generally considered acceptable for equipment of a similar type.

The purchaser is responsible for ensuring that the product is installed, operated, handled and maintained in accordance with the applicable Group3 operating manual, specifications and instructions.

3. Optional Extended Warranty

Group3 offers optional 3-Year and 5-Year Extended Warranty Plans for eligible DTM-151 Digital Teslameters and MPT-141 Hall Effect Probes.

When an Extended Warranty is purchased, the standard one-year warranty period is replaced by the selected Extended Warranty period. The warranty therefore remains in effect for a total period of three (3) years or five (5) years from the original date of shipment, as applicable.

The Extended Warranty is subject to the same terms, conditions, limitations and exclusions contained in this Limited Warranty, unless otherwise expressly agreed by Group3 in writing.

Extended Warranty Pricing

Product	3-Year	5-Year Warranty
Warranty		
Digital Teslameter	10% of Published Retail	
Price		20% of Published Retail Price
Hall Effect Probes	20% of Published Retail	
Price		40% of Published Retail Price

For the purposes of calculating the Extended Warranty charge, Published Retail Price means Group3 Technology Limited's published retail/list price for the relevant product in effect at the time the Extended Warranty is purchased, before any customer-specific discount, distributor discount, promotional discount, freight, taxes, customs duties or other charges, unless otherwise stated by Group3 in writing.

The applicable Extended Warranty price, warranty term, covered product model and product serial number shall be identified on the quotation, sales order, invoice, warranty certificate or other written confirmation issued by Group3.

An Extended Warranty does not alter the product specifications, accuracy specifications, environmental limits or operating requirements applicable to the product.

Repair or replacement of a product under warranty does not restart or extend the original warranty period. Any repaired or replacement product or component shall remain covered for the balance of the applicable original or Extended Warranty period, subject always to rights which cannot legally be excluded under applicable law.

4. Changes in Product Design

The Company reserves the right to make changes or improvements in product design, construction, software, specifications or components without incurring any obligation to modify, upgrade or replace products previously manufactured or supplied.

5. Limitation of Warranty and Liability

Except for the warranties expressly provided above, and to the maximum extent permitted by applicable law, no other warranties, representations or conditions are expressed or implied, including warranties or conditions of merchantability, satisfactory quality or fitness for a particular purpose.

To the maximum extent permitted by applicable law, the Company shall not be liable for indirect, incidental, special or consequential losses or damages arising from the use, inability to use, failure or malfunction of a product.

Nothing in this Limited Warranty excludes, restricts or modifies any statutory guarantee, warranty, condition, right or remedy that cannot lawfully be excluded, restricted or modified under the law applicable to the purchaser.

6. New Zealand Consumer Guarantees Act

Group3 Technology Limited is based in New Zealand and complies with applicable New Zealand consumer protection legislation, including the Consumer Guarantees Act 1993 ("CGA") and the Fair Trading Act 1986 ("FTA").

Where the CGA applies to the supply of a Group3 product, the purchaser may have statutory rights and remedies in addition to the rights provided under this Limited Warranty.

Nothing contained in this Limited Warranty, including any limitation of liability, warranty period, exclusion or Extended Warranty provision, is intended to exclude, restrict or modify any right or remedy available to a consumer under the CGA, the FTA or any other applicable New Zealand legislation where that right or remedy cannot lawfully be excluded, restricted or modified.

Accordingly, expiry of Group3's standard one-year warranty or an optional Extended Warranty does not, by itself, extinguish any rights or remedies that a purchaser may continue to have under the CGA where the CGA applies.

The CGA includes statutory guarantees relating to matters including acceptable quality, fitness for purpose, compliance with description, and the availability of appropriate remedies where those guarantees are not met.

Business Purchases in New Zealand

Many Group3 products are specialised scientific, industrial and professional measurement instruments intended primarily for commercial, scientific, manufacturing, research or other business applications.

Where products are supplied and acquired in trade, the application of the CGA will be determined in accordance with New Zealand law.

Where Group3 and the purchaser are both in trade, the parties may agree in writing that the CGA will not apply to a particular transaction only to the extent that contracting out is permitted by section 43 of the Consumer Guarantees Act 1993 and it is fair and reasonable for the parties to be bound by that agreement.

Any such contracting-out arrangement must be expressly stated in the applicable written quotation, sales agreement, purchase agreement or other contractual documentation. This Limited Warranty by itself does not constitute an agreement to contract out of the CGA.

7. Extended Warranties Sold to New Zealand Consumers

Where a paid Group3 Extended Warranty constitutes an "extended warranty agreement" under the New Zealand Fair Trading Act 1986, Group3 will provide the purchaser with the disclosures and rights required by New Zealand law.

The customer will be provided with a written Extended Warranty agreement or schedule setting out, as applicable:

- the product covered by the Extended Warranty;
- the Extended Warranty price;
- the commencement date and expiry date;
- the applicable terms, conditions and exclusions;
- the rights and obligations of Group3 and the customer;
- a comparison between the protections provided by the Extended Warranty and the relevant protections provided by the Consumer Guarantees Act 1993;
- a summary of the customer's relevant rights and remedies under the Consumer Guarantees Act 1993;
- the customer's right to cancel the Extended Warranty and the procedure for cancellation; and
- Group3 Technology Limited's required contact information.

Where the statutory cancellation provisions apply, a New Zealand consumer may cancel an Extended Warranty by notifying Group3 within five (5) working days after receiving a copy of the Extended Warranty agreement, or within such other period or circumstances as may be required by New Zealand law.

Upon a valid cancellation under the applicable statutory provisions, the Extended Warranty price will be refunded as required by law.

The purchase of an Extended Warranty does not replace or reduce any rights the purchaser may independently have under the Consumer Guarantees Act 1993.

Group3 Technology Limited
Auckland, New Zealand

This Limited Warranty should be read together with the applicable product specifications, operating manual, quotation, sales terms and, where purchased, the applicable Extended Warranty schedule or certificate.

Changes to v1.0 040924

- Initial issue.

Changes to v.1.1 020926

- Limited Warranty Policy
- HHP-101 Accuracy from 1.0% to 0.5%.



Copyright 2026 G3 121- V1.1 020926

www.group3technology.com