

# HS-630 Series Portable Vibration and Temperature Meter



- Portable
- Velocity & Bearing Condition
- Temperature Measurement
- Conforms to ISO 10816-3
- Re-chargeable Battery
- Mains or In-Car Charger
- Sensor/Cable Fault Indicator
- Display Hold Function
- Choice of Metric or Imperial Measurement

The NEW HS-630 portable Vibration and Temperature Meter Kit has been designed for use as both an entry level and also a comprehensive vibration/temperature monitoring instrument for maintenance engineers across all types of industry.

The kit consists of the compact vibration meter with a combined non-contact temperature measuring sensor aided by a laser locator beam, a hand-held probe, a magnetic mount for more permanent installations, a protective carrying case, an instruction manual and battery chargers for both mains and in-car use.

The meter is microprocessor based and by selection of the controls can be easily set up to monitor acceleration (g) levels, velocity (mm/sec), displacement ( $\mu\text{m}$ ), bearing condition (BG or BV), and temperature ( $^{\circ}\text{C}$  or  $^{\circ}\text{F}$ ). A display hold function is also included.

The unit, which conforms to ISO 10816-3 also has an automatic alarm check for bearing condition.

Operating from an internal re-chargeable lithium battery, the meter offers 48 hours continuous operation. From flat, the unit can be recharged in 3 hours using either the mains or in-car charger supplied with the kit.

Because of its compact size, ease of use and battery operation, the HS-630 allows engineers to monitor vibration and temperature levels on important machinery anywhere around the factory.



## Specification

### Technical Performance

Input	100 mV/g constant current accelerometer
Accelerometer	Hand held, supplied with 0.8 M cable
Ranges	Acceleration ... 0-20g Peak Velocity ... 0-200 mm/s RMS Displacement ... 0-2000 $\mu$ m pk-pk Bearing Condition (BG) 0-20g RMS Bearing Condition (BV) 0-200 mm/s RMS
Accuracy	$\pm 5\%$
Frequency Range	Acceleration ... 5 Hz to 12 kHz Velocity ... 10Hz to 1 kHz Displacement ... 5 Hz to 1 kHz Bearing Condition (BG & V) ... 1 kHz to 12 kHz Automatic Alarm Check for Bearing Condition
Temperature Range	-20°C to 120°C or $-5^{\circ}$ F to +250°F
Laser Guide	Red, <1 mW, IEG 60825-1 compliant
Distance Range	For temperature measurement 0 to 2 metres Distance/Spot Dia. Ratio 8:1
Accuracy	$\pm 5\%$
Display	LCD
Hold Mode	Displays alarm status against ISO 10816-3

### Electrical

Power	Lithium rechargeable battery -3.6 Volts, 1700 mA hours 48 hours continuous operation -Auto switch-off after 3 minutes
Battery Charge	3 hrs from flat, supplied with meter, charger & car charger

### Environmental

Temperature Range Meter	Operating ... -10 to 50°C -Storage ... -20 to 60°C
Temperature Range (Accel)	-20° to 90°C
Hand Held Meter Sealing	IP54

### Mechanical

Case Material	Plastic
Dimensions	Meter 115 x 70 x 25 mm
Weight	Meter 160 gms, Accelerometer (incl cable) ... 200 gms
Magnetic Base	22 kg pull strength
Spike	70mm



# To the Safety, Health and Environment Professional...

The issues faced every day by Health, Safety and Environmental professionals are vast and varied. At Castle, we have spent a lot of time developing products and services to make your life easier!

Castle Group Ltd are one of the leading international group specialists in technical safety, health and environment solutions. Whether you are in Industry, Construction, Local Authority or anywhere there are safety or environment issues, we are a resource you really could use. We can help with Noise, Vibration, Air sampling, Gas detection, Light and temperature and just about anything else that needs measuring. The following services show you how we can help

## FREE Health & Safety Training Seminars!

To get you off the ground, refresh your knowledge or just to get a taste, Castle is continually running FREE Safety, Health and Environmental seminars around the country. Covering subjects from Noise at Work, to COSHH and Audiology, the list is ever growing, as are the locations. Check out our web site for the next seminar near you.



[www.castlegroup.co.uk](http://www.castlegroup.co.uk)

## Castle Instruments

Dealing with many Safety, Health and Environmental issues may well mean you need access to a plethora of **equipment** and **instrumentation** to carry out measurements and assessments necessary for the job.

At Castle we can provide you with just about any of the equipment you might need. All our equipment comes with the **guarantee** of back-up and support you only get from a company with 40 years under its belt! Here are a few of the core products we can offer, but we can also source anything you may need!

Noise and Vibration Measurement Equipment  
Audiometers, Otoposcopes and Booths  
Air-Sampling Pumps, Calibrators and Consumables  
Gas-Detection and Personal Monitors  
Emissions and Air Quality  
Light, Temperature, Humidity and Airflow

[www.castlegroup.co.uk](http://www.castlegroup.co.uk)



## Castle Training Academy

Training is becoming an ever more important area of consideration to industry **professionals** and the Castle Training Academy is fulfilling the need for more and more companies every year. The Academy now offers **competence** training along with IOSH and CIEH **qualifications**. What is more, look out for our NEW City & Guilds provision. All courses come with professional **CPD** points and many are eligible for CITB and Train to Gain **grant funding**.



You can see a full list of courses and book-online on our website.

[www.castletrainingacademy.com](http://www.castletrainingacademy.com).

## CastleRent

There are a number of **reasons** why rental may be the solution for you. You may only have a one-off use, a special contract, a limited budget or a need for supplementary products. In any case, our **flexible booking** system, next day a.m. delivery and open-pricing mean that you can address any of these issues without delay. For long-term contracts, such as construction projects, Castle Rent is also a **tax efficient** way to 'own' equipment. Finally, for peace of mind, what better way is there to try a product before deciding to buy it? We even give you money back if you do purchase!

### The Advantages of Castle Rent;

- Easier on cash-flow
- Rent for long- or short-term as you need it
- Let the Tax Man pay for you!
- Try before you buy
- Four weeks for the price of three
- No on-going maintenance costs
- Sourcing service for any other equipment you need

[www.castle-rent.com](http://www.castle-rent.com)

## Castle Care

Measurement instrumentation must be **regularly** calibrated to a traceable standard and this is certainly true for most health, Safety and Environmental monitoring equipment. At Castle, our team of **highly trained and experienced** technical staff can service and calibrate almost any type of monitoring equipment from Noise and Vibration meters to Thermometers to Scales. The Castle '**Premier Service**' includes menu pricing and a normal turnaround time within 5 days. What is more, we will evaluate any instrument and return it for **FREE** if you do not want to proceed.



### Castle premier service and calibration offers...

- Free Evaluation Service
- Clear and Simple Pricing
- UKAS Accreditation Available
- Large range of equipment calibrated
- 4 Levels of calibration available for most equipment
- Annual contract calibrations with up to 20% off

[www.castle-care.com](http://www.castle-care.com)

## Castle Contracts

For companies with **multiple** pieces of **equipment**, there is also Castle's 'Contract Calibrations'; an annual scheme to take the hassle out of maintaining equipment certification. Castle will issue calibration **reminders**, collect your equipment if required and return it calibrated as soon as possible. This scheme also affords a **saving** of up to 20% on annual calibration charges.

[www.castle-care.com](http://www.castle-care.com)

## Castle Consultancy

Castle **experts** are waiting to help you. Because we have a **network** of consultants across the country, we are poised to **react** to your requirement. Not only can we normally provide a local service, but we can usually help right away if you need us to!

Whether you are limited for time, in need of further **expertise** or just want some **advice**, we can assist. We have provided a wide range of services to many top companies for projects large and small.

**Here are some of the services we can provide, but if it's not here, just ask!**

- Noise or Vibration risk assessments
- Building Acoustics
- COSHH compliance
- Environmental Impact Assessments
- Air Quality Monitoring
- Occupational Health Screening programmes

[www.castle-consultancy.com](http://www.castle-consultancy.com)

## Castle Online

You can access all our products and services online whenever you want, just go to [www.castlegroup.co.uk](http://www.castlegroup.co.uk) and you will find a **knowledgebase** packed full of useful facts and information. You will also find details of all our upcoming **FREE seminars** and training courses as well as product information on literally hundreds of health, safety and environmental items, which are available to purchase directly through a secure server. Among other things you will find:

- HS&E Measurement Products
- Books, Standards and Publications
- HS&E CD's DVD's
- Stopwatches and Timers
- Scales and Distance Measurement
- Water Testers

You will also find our shop on ebay of all places - <http://stores.ebay.co.uk/Castle-Group-Safety> or just go onto ebay and type Castle Group Safety in the shops section.

## Who are Castle

For 40 years, Castle has been driving forward with product and service innovation. For a number of the early years, the company focussed on the development of sound and vibration measuring equipment. This was then progressed by adding training courses, rental and consultancy eventually leading to the Castle of today, which is helping many customers deal with a vast range of health, safety and environmental issues in a variety of ways. The future is a very exciting place at Castle and we are working on many new initiatives with our customers firmly in mind!

