

# Castle VEXO S Vibration Meter

## Vexo (GA2006S) Single Axis Machinery Vibration Meter

### The Concept

The Castle Vexo S has been developed out of the need for an exacting product for an exacting industry. To operate successfully in the world of Maintenance condition monitoring and fault diagnostics, any new vibration meter must live up to certain expectations. The Vexo S has been designed specifically to function at maximum performance when the going is tough.



### VEXO S (GA2006S)

The Vexo S is dedicated to monitoring vibration from industrial sources such as rotating machinery, bearing housings and any other source of mechanical vibration. With dedicated alarm modes for machinery rating and bearing condition, the Vexo S is perfectly suited to busy maintenance teams who need the right answers right now!

The supplied re-chargeable battery pack and charger means you also won't ever be fumbling around for fresh batteries when you are supposed to be on the shop floor making measurements!

### Couldn't be Simpler!

With a large colour screen and the support of VibdataPro PC software, the Vexo S requires virtually no set-up so power it on, press record and that's it!

Just about everything from here is available to view directly on the screen without the need for scrolling.

### Connectivity

All measured values can be saved to the internal flash memory of the Vexo S for subsequent output. The results can be viewed on the instrument's own display or downloaded to Castle's VibdataPro PC software via a high speed USB connection. Software Vibdata LITE is included with each instrument!

## POCKET POWER

### Miniaturised Power!

The memory built into the Vexo S is large enough to never have to worry about and will store measured results safely in 'flash' format. Results can be recalled to the screen or can be downloaded for analysis on a laptop or PC.

Each instrument is supplied with a comprehensive user manual in electronic format and a laminated getting started sheet.

### The Vexo Range

There are 2 models in the Vexo range; the Vexo S as detailed here and the Vexo H, which is a dedicated Hand Arm Vibration meter, with the distinct benefit of small size and powerful measurement capability.

Both these meters make full use of their large colour display to ensure the simplest of user interfaces and clearest presentation of results no matter the application.

### Vexo S (GA2006S) - Single Axis

- Single Axis mode for simple set-up
- Re-chargeable Battery Pack & Charger
- Large Colour Display
- Large 'Flash' memory
- Rugged Accelerometer and Cable for industry
- Only 3 operational buttons for simple use

### Applications

- Machinery condition to ISO 10816-1, 3 & 7
- Bearing condition indication
- Trending analysis (with optional VibdataPro)
- Environmental Vibration

### What's Supplied with the Vexo (GA2006S)

- Vexo S Instrument, Accelerometer and 1m Cable
- Rechargeable Battery Pack and Recharger
- Removable Spike Probe
- Getting Started Laminated Sheet
- Vibdata LITE software & USB Cable
- Carry Case for GA2006S and Accessories

# Vexo (GA2006S) Specification

## Instrument Standards:

### GA2006S

BS ISO 10816-1 : 1995 + A1 : 2009  
BS ISO 10816-3 : 2009  
BS ISO 10816-7 : 2009

## Level Ranges: GA2006S (Integration = Acceleration)

Range	m/s <sup>2</sup>	g
Low	0.005 - 20.0	0.00051 - 2.04
High	0.05 - 200.0	0.0051 - 20.4

## Level Ranges: GA2006S (Integration = Velocity)

Range	mm/s
Low	0.06 - 250
High	0.6 - 2500

## Level Ranges: GA2006S (Integration = Displacement)

Range	μm
Low	4.0 - 16500
High	40.0 - 165000

## Measurement Channels:

One

## Parameters:

Acceleration: Aeq, Amax, Peak, Crest Factor  
Velocity: Veq, Vmax, Peak, Crest Factor  
Displacement: Deq, Dmax, Peak to Peak, Crest Factor

## Linear Operating range:

72 dB Acceleration, 60dB Velocity, Displacement

## Frequency Weighting:

W <sub>FL</sub>	W <sub>LP</sub>	W <sub>HP</sub>
2Hz to 8kHz	2Hz to 1kHz	1kHz to 8kHz



## Memory:

Flash memory storing up to 992 recordings

## Transducer:

Castle KD1011, 100mV/g

## Noise Floor:

<0.002 m/s<sup>2</sup> Low Range  
<0.020 m/s<sup>2</sup> High Range

## Display:

Full Colour Graphic OLED Display (160 x 128)

## Batteries:

NiMH re-chargeable cell pack  
Typically 10 hours continuous use

## Connections:

Input: 3.5mm Stereo Jack Socket  
Download: USB Micro B (Cable Supplied)  
Recharge: DC Socket (Charger & Cable Supplied)

## Environmental:

Temperature Operating Range: -10 to + 50°C  
Humidity: Up to 90% RH Non Condensing

## Electromagnetic Compatibility:

Designed in accordance with the following  
Electromagnetic Compatibility Directives: -

- SI 2005/281
- 2004/108/EC

## Case:

High Impact ABS plastic with tactile membrane keypad

## ORDERING INFORMATION

GA2006S\* - Vexo S Vibration Meter

## Accessories

PC009\*\* - VibdataPro software  
GA606 - Vibration Calibrator  
KA021\* - Carry Case  
KD1011\* - Single Axis Accelerometer 100mV/g  
KD1202 - Mounting Studs (Pack of 5)  
KD1203 - High Strength Mag Mount  
KD1206\* - Removable Spike Probe  
KD1215 - Glue Studs & Glue (Pack of 5)  
01VIBBATT\* - 2.4V 2100mAh NiMH Battery Pack  
01PSU5\* - NiMH Battery Pack Recharger  
01ZL1097-01\* - Single Axis Accelerometer Cable 1m  
01ZL1108-01\* - USB Cable 1m

\* supplied with the GA2006S

\*\* upgrade from supplied Vibdata LITE

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# 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 Audiometry, 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, Otoscopes and Booths
- Air-Sampling Pumps, Calibrators and Consumables
- Gas-Detection and Personal Monitors
- Emissions and Air Quality
- Light, Temperature, Humidity and Airflow
- PAT Testing Equipment
- Visual Inspection

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



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## 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 and 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!