

Castle Sonus Model E Pocket Meter

Environmental Sound Level Meter GA116E

The Castle Sonus range of pocket sized sound level meters bring simplicity and power to the world of Noise at Work and Environmental sound monitoring. From basic non-logging sound level meters to combined sound and dose meters with time and date stamped data logging capability.

There are a number of system packages available to suit many applications from simple tasks such as alarm monitoring, to a fully weatherproof system for long-term environmental solutions, there are also dedicated packages for Noise at Work requirements.

The environmental model of the Pocket Sonus Meter range is the class one Sonus GA116E. This instrument boasts an impressive noise floor reading allowing for the measurement and recording of low level ambient noise.

The instrument is a full data logging and integrating sound level meter with a total linear measurement span of 108dB.

Never before has such a credible and high performing environmental sound level meter been available at such affordable prices.

The meter measures 3 percentiles one of which is user selectable plus the meter features dual measurement, so two versions of most parameters can be measured simultaneously.

Not only that connectivity is via high speed USB and the meter ships with free noise analysis software dBdataLITE and download cable.

Even more impressive, this meter is available in a fully weatherproof kit operating from one 12 Volt battery that lasts up to one week, has hot swappable power connections and weighs less than 5kg including the battery.



POCKET POWER

All measured values can be saved to the internal flash memory of the Sonus GA116E for subsequent output. The results can be viewed on the instruments own display or downloaded to the included dBdataLITE noise analysis PC software via a high speed USB connection.

Using the instruments could not be simpler. The simple user interface can easily be scrolled and selected to immediately display the information you need. The keypad also has a dedicated dB Range key, simply press and then select your required range.

The measured noise is computed and stored as a series of pre-chosen time intervals. The GA116E instrument will store up to approximately 2100 intervals in either one or multiple recordings.

Each instrument is supplied with a comprehensive printed user manual and a getting started sheet.

- Measures Lp, Leq, Lmax, LE, L10, L90, L(user)
- Measures parameters simultaneously including LAeq and either LZeq or LCeq
- Under range and Overload indicators
- A, C or Z frequency weighting selection
- A, C or Z Peak measurements
- 'Slow', 'Fast' and 'Impulse' time weighting selection
- Save results to internal flash memory
- Download data to a PC via a USB connection
- Noise Analysis Software included with the meter
- Small and light weight, fits into small shirt or jacket pocket and also supplied with a strong pocket clip.
- Lockable Key pad through options
- Single battery operation of typically 12 hours
- Weatherproof kit option



Sonus Model E (GA116E) Specification

Instrument Standards:

IEC 61672-1 : 2002 Class 1 Group X

Level Ranges:

Range	Display Range	Linear Range	Peak Range
20 - 90 dB	19 - 93 dB	22 - 90 dB	30 - 93 dB
40 - 110 dB	39 - 113 dB	40 - 110 dB	50 - 113 dB
60 - 130 dB	59 - 133 dB	60 - 130 dB	70 - 133 dB

Measurement Channels:

Two

Parameters:

Lp, Leq, Lmax, Apeak, Cpeak, Zpeak, LE, L10, L90, Ln (user selectable), Measurement Run Time, Overload, Interval Duration

Linear Operating range:

70 dB

Frequency Weighting:

'A', 'C' and 'Z'

Combinations of 'A', 'A&C' simultaneous or 'A&Z' simultaneous available for Lp, Leq and Lmax

Time Weighting:

'Slow', 'Fast' and 'Impulse'

Percentiles:

L10, L90 and either L1, L5, L50, L95, L99

Memory:

2100 Data Intervals Maximum in one or multiple recordings

Microphone (Type Free Field):

ACO 7146 pre-polarized 1/2" condenser microphone, 50mV/Pa

Microphone Preamplifier:

Low Noise, Removable Preamplifier

Noise Floor:

GA116L: <12.0dB(A), <12.0dBC, <14.5dB(Z)

Display:

Alphanumeric LCD with Contrast Control, digit size 7mm x 5mm

Batteries:

1 x PP3 (9V) - Typically 12 hours continuous use

External Power:

12v - 18v via Multi Purpose I/O Socket

Connections:

9 Pin Multi Purpose I/O Socket for: -
USB (Cable Supplied), AC Output, External Power

Environmental:

Temperature Operating Range: -10 to + 50°C

Humidity: Up to 90% RH Non Condensing

Electromagnetic Compatibility:

IEC 61672-1 : 2002

Case:

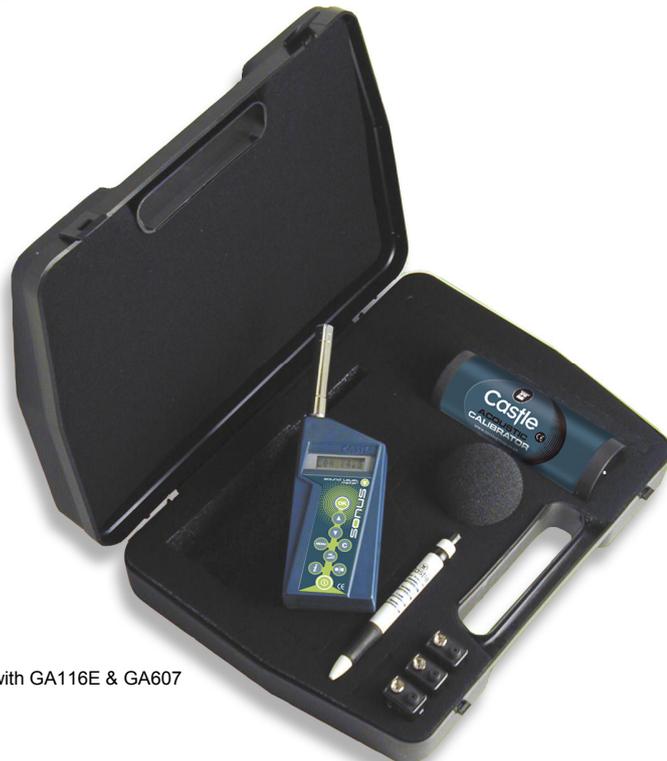
High Impact ABS plastic with membrane keypad



KA020 Weather proof System Case with GA116E & GA607

ORDERING INFORMATION

GA116E	- Sonus Environmental Meter Class 1
GA607	- Dual Level Calibrator Class 1
KA010	- Attaché Kit Case
PC007	- dBdataPro software
KA020	- Weather proof System Case
ZL2094-03	- Weather proof cable (3m)
ZL2094-10	- Weather proof cable (10m)
MW402	- Weather proof microphone housing
NK007B	- Weatherproof Kit



KA010 Attaché Kit Case with GA116E & GA607

Keeping you measuring...



Measuring the impact of your business on the world is an ever more important task. Whether this is the effect of business activities on employees, machinery or the environment, you need to know precisely where you are as the consequences of not knowing can lead to huge inefficiencies and avoidable costs.

Castle have spent over 40 years making sure we understand what you need to measure, how to measure it and what to do about the results—just ask the experts!

www.castlegroup.co.uk

If you go to our main website, you will find a huge resource of information and knowledge to help you understand the issues you face.

- Safety and health of employees
- Impact on the environment
- Machinery condition and maintenance

You will also find access to a range of useful resources to help you tackle these issues
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www.castleshop.co.uk



Measuring requires access to equipment and instrumentation and finding this instrumentation can be a challenge. That is why we have set up the Castleshop.co.uk. This online shop contains thousands of products in a huge number of fields of measurement.

We took the trouble to look for all this equipment so you don't have to.

Check out www.castleshop.co.uk for access to equipment like this. Having said that, we're always adding products, you it'll probably be there even if it isn't here!



- Noise and Vibration Measurement Equipment
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- Gas-Detection and Personal Monitors
- Emissions and Air Quality
- Light, Temperature & Humidity
- Airflow and pressure
- EMF testing equipment
- Electrical testing including PAT
- Chemical testing for water quality
- Borescopes & Microscopes
- Weighing scales
- Thermal Imaging
- Coating thickness and hardness



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**.

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Castle GROUP
technical safety & environmental solutions



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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!

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- Four weeks for the price of three
- No on-going maintenance costs
- Rent-to-Buy!

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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.castlecalibration.com

Calibration Partnership

For companies with **multiple** pieces of **equipment**, there is also Castle's 'Partnership 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



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
- Water Sampling and Quality monitoring
- Hydrology surveying
- Soil Sampling and Testing
- Ecology surveys and monitoring programmes

www.castle-consultancy.com

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!

