GRAVITY SHOCK RECORDER

(X,Y,Z)
An ultra-compact data recorder that records acceleration in three directions.

G-MEN DR20

For "observation" or "control", G-MEN works to monitor vibration and shock.

(Actual size)

G-MEN DR20

Transportation Vibration

Perfectly suited for quality verification in all areas of logistics

Created with micro-machine technology, the G-MEN unit has achieved both miniaturization and cost reduction thanks to its inbuilt ultra-compact 3-axis acceleration sensor. The G-MEN DR20 is capable of switching the 3-axis static acceleration value ranges between a 10G and a maximum of 20G, and is able to record with a maximum sampling period of 10ms. The body contains an inbuilt temperature and humidity sensor to allow the recording of the 3-axis acceleration/temperature, as well as temperature and humidity fluctuations over time. The body also contains an LCD panel which allows the user to check information such as recorded data and configuration settings. Using the

"G-Trace.net" software included as standard, recorded data can be easily transferred via the unit's USB interface to a PC. This allows instantaneous graphing or printing of data. The recorded data can be saved in CSV format for data analysis using spreadsheet software, tailored to your measurement needs. Traditionally, it was difficult to assess causes of damage in transit. However, now it is possible to instantaneously measure and record date/times and acceleration values when there is damage caused by vibration or dropping. This makes this unit perfectly suited for quality assurance checking for transported goods.

GRAVITY SHOCK RECORDER

G-MEN DR20

Main Features

■ The body has a built in 3-axis (X, Y, Z) acceleration sensor for real time (1msec) recording.

■ The acceleration sensor range can be switched between 10G and a maximum of 20G.

■ The body has a built in temperature and humidity sensor for temperature and humidity recording.

■ Contains three alkaline AAA batteries for approximately 50 days (Minimum sampling frequency 10mec) worth of recording.

■ Recorded data can be exported via an internal USB interface.

■ The "G-Trace.net" software, included as standard, can be used for instantaneous graphing of recorded data.

■ The recorded data can be saved in CSV format for data analysis using spreadsheet software to meet your measurement needs.

External dimensions

60.5(W)mm

33(D)mm

75.5(H)mm

Main Specifications

| Model	G-MEN DR20	
Measured items	3-axis acceleration, Temperature and humidity	
Acceleration sensor	Static acceleration: ±20G (±10%)	Static acceleration: ±10G (±10%)
Frequency response	0Hz - 100Hz	
Minimum sampling frequency	1・2・5・10・20msec (Selectable)	
Measurement resolution	0.2G	0.1G
Temperature range	0 - 50°C (±3°C)	
Humidity range	30 - 90%RH (±10%RH)	
Measurement interval	1, 5, 10, 15, 20, 30 seconds; 1, 2, 3, 4, 5, 10, 15, 20, 30 minutes (Selectable)	
Recording capacity	65,500 data	
Operation display	LCD display	
Record retention	EEPROM	
Communication scheme	USB (MiniB)	
Power supply	AA alkaline batteries (LR6) × 2	
Battery life	Approximately 50 days (Depending on the measurement environment and battery performance)	
Operating temperature and humidity range	0 - 50°C, 70% RH or below (There should be no dew condensation)	
External dimensions	75.5(H) × 60.5(W) × 33(D) mm	
Weight	Approximately 135g (Including the batteries)	
Accessories	USB cable, AA alkaline batteries (2), Warning label (1), Metal fitting for attachment (1 set), Dedicated software (CD-ROM)	
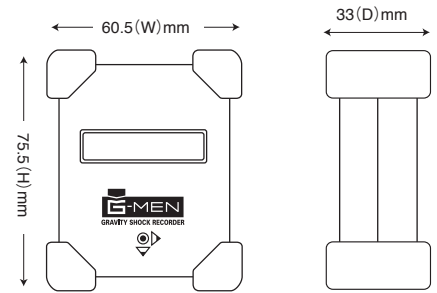
Options

External power source unit
EPU-UT1
EPU-UT2
External dimensions: 111(H) × 81(W) × 50(D) mm
Using an external power based unit allows it to continue running for long periods of time.
EPU-UT1: Operation time with 2 size D alkaline batteries is about 10 months at a 10msec sampling interval. (approx.)
EPU-UT1: Operation time with 2 size C alkaline batteries is about 4 months at a 10msec sampling interval. (battery life will differ depending on the usage conditions.)

Warning labels (contains 60 sheets)
Attach them to shipping boxes to further call attention to the person in charge of the shipping.
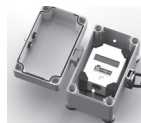
Dust/water proof case
A case specially designed for the G-MEN, with a protection grade of "IP65".
Case external dimensions (excluding the legs) 75H × 97W × 125D

Software specifications G-Trace.net (Software included as standard)

Compatible models	G-MEN DR01, G-MEN DR20, G-MEN DR100			
Compatible operating systems	Microsoft Windows 10, 7 Japanese/English versions			
Channels	X-axis, Y-axis, Z-axis, temperature, humidity			
Communication function	Configuration settings, data reading, start conditions, online measurement			
Data storage	GTR (Dedicated extension) format, CSV format			
Graphical display	Condition setting screen, graph, data list			
Graph settings	Graph types	Line graph, bar graph	Printed line thickness	Two types
	Graph title	Unspecified	Displayed time	Time, elapsed time
	Graph line color	Unspecified	Graph	Enlarge, reduce
	Display line thickness	Two types	Copy	Graph copy

⚠ For your safety. Please make sure to thoroughly read the "User's Manual" and "Safety Precautions" before use, and be sure to always operate the device correctly.
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* Specifications of this product may be changed without prior notice.

Software included as standard

G-Trace.net

This software is used to easily perform G-MEN condition setting and data processing.

G-MEN official website: www.g-men.jp   **www.g-men.jp**

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Manufacturing, Sales Agency