



G-TECH
INSTRUMENT INC.

GT3300 FAMILY

MICROPROCESSOR BASED VIBRATION METERS
GT3303/GT3305/GT3337



GT3300--

A family of vibration meters that consists of your dreamy features.

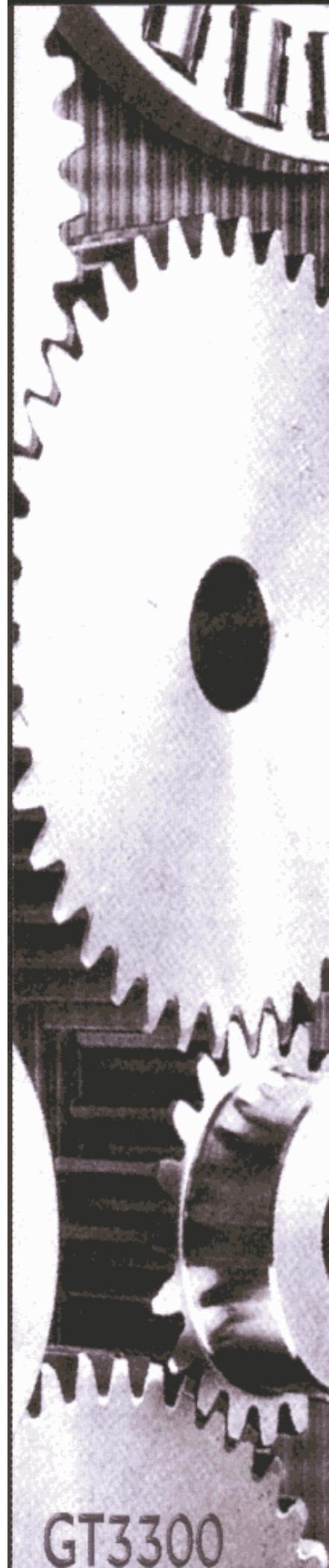
- ◆ Microprocessor based instruments
- ◆ SMD products
- ◆ IP65 housing
- ◆ EMI protected shielding
- ◆ Battery charge indicator
- ◆ Input bias indicator
- ◆ Display vibration unit and detection
- ◆ Backlit, high-resolution, graphical mode LCD display
- ◆ Tactile feedback membrane keypad with beeper
- ◆ Programmable sensitivity value of sensors
- ◆ Average mode
- ◆ Hold mode for freezing display
- ◆ Peak hold mode
- ◆ Gain and precision reading
- ◆ Memory for saving 1000 data
- ◆ RS232 port and transfer program
- ◆ Industrial accelerometer
- ◆ High-strength magnetic base
- ◆ Patented quick connect spike
- ◆ Carrying pocket and hard case

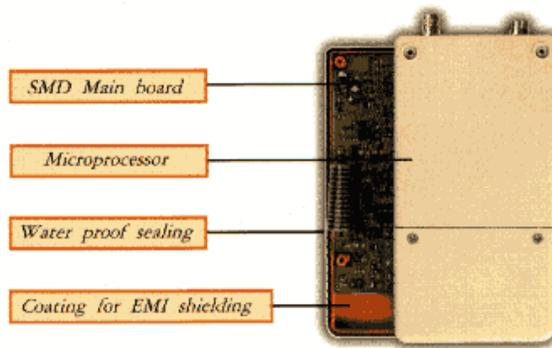
INTRODUCTION:

The GT3300 series, including GT3303, GT3305 and GT3337, is a family of microprocessor-based vibration meters. With these portable meters' incorporation of the most advanced electronics and mechanical packing technology available today, they are made to survive from harsh environment and satisfy your various measurement works of vibration levels.

By taking advantage of the microprocessor, this family of meters can easily average, hold or peak hold your vibration data, display them with graphical icons and even store them into built-in memory for post analysis.

Each GT3300 meter incorporates a large, graphical, backlit LCD screen, providing you rich system information, yet it is very easy to use. IP65 rated housing, EMI shielded coating and standard carrying packet make GT3300 the best choice of your in-place measurement work.





STATE-OF-THE-ART HARDWARE

In order to prevent from heat problem, reduce waste of power and diminish the system noise, the GT3300 family of meters is made by state-of-the-art SMD (surface mounting device) technology. Lavishly adapting first-class electrical devices ensures the accuracy and stability of each GT3300 meter. Based on the microprocessor architecture, this family of meter delivers required functionality and flexibility in performing a wide variety of user applications.

SUPERIOR HOUSING DESIGN

The external instrument case is made of industrial strength ABS material. A sealed membrane keypad, with tactile feedback, is incorporated. Between these connecting edges of case, sealing material is inserted to ensure perfect sealing condition. On the inner surface of instrument case, a layer of conductive material is coated to prevent from EMI problem. Consequently, the GT3300 family is created to survive from various kinds of harsh environment.

GRAPHICAL-MODE, BACKLIT SCREEN

The high-resolution (128x32) graphical-mode screen provides you detailed presentation of both graphical and numerical information. With graphical-user-interface design, the user can easily read various information by related graphical icons. For your operation in dark place, auto-off LED back light is a standard option of GT3300 family.



High-resolution, backlit, graphical mode LCD and membrane keypad

BATTERY AND BIAS INDICATORS

When the power is on, a GT3300 meter will continuously monitor its battery charge and input bias condition, and shows the information graphically by indicators. From the Bias indicator you will see whether the cabling and accelerometer is working normally or not. The battery indicator shows you the current residual charge of battery by 5 sections of charge gauge. These are standard features for all the GT3300 family of meters.

HOLD FUNCTION FOR TRANSIENT VIBRATION (GT3305/37)

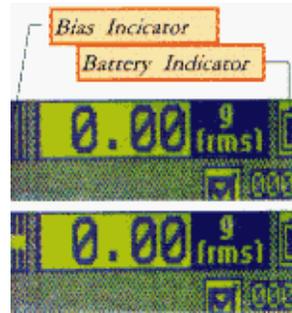
In many occasions, it is necessary to measure the transient vibration level at certain speed. For example, one may need to measure the vibration data of a rotating machine during its start-up process at every 500-rpm step. With this hold function, it is easy to freeze the required reading at certain speed.

GAIN AND PRECISION READING (GT3305/3337)

For those precision machines that have very low vibration levels, a precision reading is necessary for it. In addition to an extra quiet accelerometer that supplied as a standard accessory, both GT3305 and GT3337 incorporate a built-in gain circuit to amplify small vibration signals and show the reading in precision mode when you turn the gain mode on. For example, both GT3305 and GT3337 can measure the vibration levels as small as $0.1 \mu\text{m}$ when necessary.

AVERAGE AND PEAK HOLD (GT3305/3337)

Both GT3305 and GT3337 can show the average data of the latest 10 measurements in moving average mode, or the maximum vibration level during the peak hold mode. These features are very useful when one needs to take maximum or averaged data of an unstable vibration.



The GT3300 meter automatically detects whether the cabling and sensor is OK (upper) or not (lower).

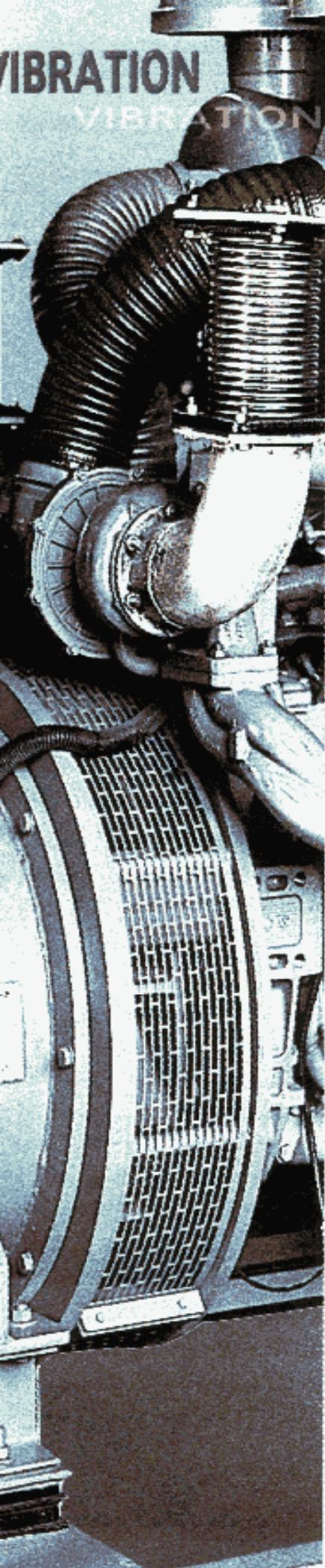


The GT3305/37 meters measure very precision vibration levels in gain mode.



The display is frozen by hold function when this meter is in moving average mode.





MEMORY FOR DATA STORAGE (GT3337)

With the incorporation of built-in EEPROM memory, a GT3337 meter can store up to 1000 sets of vibration data. These saved data can be recalled by entering the meter's REVIEW mode. An optional RS232 transfer program is also available for downloading the saved data from memory to a PC for post analysis or report building. Because EEPROM is a kind of non-volatile memory, the data saved in the meter will not vanish even if you turn the power off or disconnect the battery power.

COMPLETE ACCESSORIES

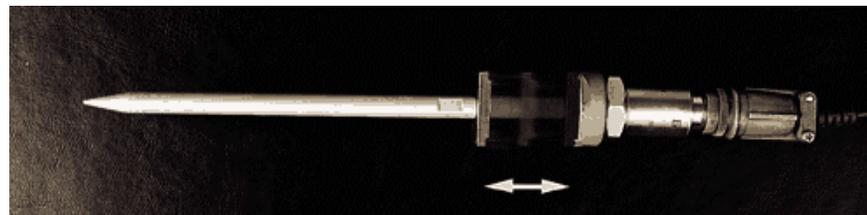
Each GT3300 meter kit contains a complete set of accessories. They include an industrial accelerometer GT2100A with coiled cable, a high-strength magnetic base, a patented quick-connect G-Probe™ spike, an AC output adapter, a carrying pocket, a hard case and user manual. The OEM GT2100A is an accelerometer that has all the industrial features, like



hermetically sealed stainless housing, quartz sensing element, low impedance output and high output sensitivity (100 mV/g nominal).

G-Probe™, QUICK CONNECT SPIKE

The GT3300 accessories kit provides you two ways of accelerometer mounting. One can mount the accelerometer either by the magnetic base or by the spike. Usually, the magnetic base is recommended because it provides higher frequency response than the spike. However, due to the room limitation or non-ferrous object, one may need to use the spike from time to time. The G-Probe™ design utilizes the magnetic force of the magnetic base to hold the adapter of spike. With this smart design, the users can easily and quickly change their ways of mounting for in-place application.



GT3303

The GT3303 vibration meter is the basic model of the GT3300 family. This meter measures vibration displacement, velocity and acceleration with built-in filter that conforms ISO2954. GT3303 incorporates all the unique features of GT3300 family, such as backlit LCD, battery and bias indicator, IP65 housing and EMI shielding, etc. This meter is very affordable and is ideal for your basic vibration measurement work.



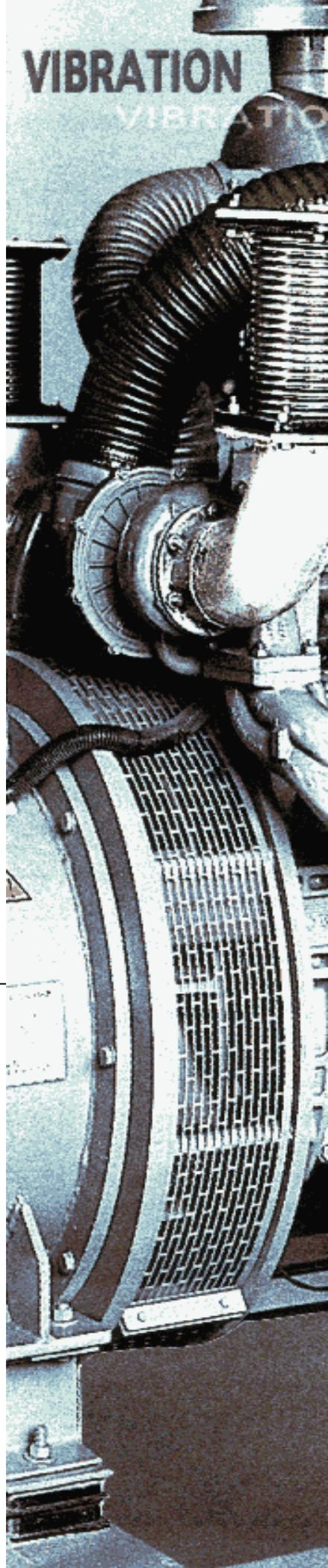
GT3305

The GT3305 vibration meter has all of the features of GT3303, plus gain mode for precision measurement, hold mode for freezing display, average and peak hold mode for processing unstable vibration data. This meter has some very useful enhance functions. If you need to measure transient vibration data or very low vibration level, this one is very suitable.



GT3337

The GT3337 vibration meter/data collector is the most complete model of the GT3300 family. It has all of the GT3305 features, plus memory for storing up to 1000 vibration data. The user can buy optional RS232 program for downloading data to a PC for post analysis. If you need to measure and record large amount of vibration data, this one is your best solution.



Ordering Guide

Meter Kit

GT3303 Kit: GT3303 + Standard Accessory

GT3305 Kit: GT3305 + Standard Accessory

GT3337 Kit: GT3337 + Standard Accessory

Standard Accessory

GT1080 x1, GT1082 x1,

GT1050 x1, GT1033Cx1,

GT1034P x1, GT2100A x1,

Accessories

GT1080	High strength magnetic base
GT1082	G-Probe patented spike
GT1050	Coiled cable, BNC/Mil 2pin
GT1033C	Carrying case
GT1034P	Carrying pocket
GT2100A	Industrial Accelerometer
GT4330S	RS232 Transfer Software and RS232 cable

Feature	Specification	3303	3305	3337
Displacement	0~1999 um, p-p (10~1KHz BP)	☑	☑	☑
Velocity	0.0~199.9 mm/s, 0-p (10~1KHz, ISO2954)	☑	☑	☑
Acceleration	0.00~19.99 g, rms (10 Hz HP)	☑	☑	☑
Accuracy	±5% (10 ~ 10 kHz)	☑	☑	☑
Battery indicator	Low/ 25%/ 50% / 75%/ full, graphical indicator	☑	☑	☑
Sensor bias indicator	Normal/ open/ short, graphical indicator	☑	☑	☑
Back light	LED back light, auto off	☑	☑	☑
Sensor's sensitivity	(100mV/g ±30% programmable)	☑	☑	☑
Housing rating	IP 65, with EMI protection	☑	☑	☑
AC output	±2.8V	☑	☑	☑
Power supply	9V alkaline battery x1(about 50 hours operation)	☑	☑	☑
Auto power off	5 minutes after pressing any key	☑	☑	☑
Display	120x32 graphic mode LCD	☑	☑	☑
Size	160x850x30mm	☑	☑	☑
Weight	About 260 gram (including battery)	☑	☑	☑
Hold function	Freeze the display instantly		☑	☑
Average function	Display the averaged value of the latest 10 data		☑	☑
Peak hold function	Display the maximum value		☑	☑
Gain	x10, and increase the reading precision		☑	☑
Displacement w/ gain	0.0~199.9 um, p-p		☑	☑
Velocity w/ gain	0.00~19.99 mm/s, 0-p		☑	☑
Acceleration w/ gain	0.000~1.999 g, rms		☑	☑
Memory	Memory for 1000 measured data			☑
Review function	Recall and display the saved data			☑
Download program	Transfer data from a GT3337 to a PC via RS232			☑

Accelerometer WR786A

Sensitivity:	100mV/g nominal
Housing:	Stainless, hermetically sealed
Frequency range:	(±5%)3~5KHz
Electrical noise	0.7 mg
Grounding	Case isolated, internally shielded
Temperature:	-50°C~120°C



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