

**If It Needs Measuring...  
Then You Need The Revolutionary  
MMS3000-GP SERIES!**

**GP4™  
&  
GP8™**



**General Purpose Data Loggers That  
Measure and Record  
Virtually Anything!**

# The Best of Both Worlds

Engineers require data recording instruments that are truly flexible, that quickly and easily adapt to a variety of measurement applications. At the same time, Accountants and Financial Controllers demand the most stringent use of data acquisition and instrumentation funds — a constraint that often excludes the most convenient and useful products on the market. Now with the **MMS3000-GP** Series, Engineers and Accountants can both finally agree on the same product.

The **MMS3000-GP** Series combines the usual benefits of low-cost and ease-of-use found in single-purpose data loggers coupled with the power and sophistication of more expensive rack-mount systems. The MMS3000-GP Series allows you to measure and record a variety of measurement parameters in a single session. Each 4-20mA input channel can be individually scaled to measure, display and record data in the engineering units of your choice. A menu of commonly used engineering units is available for quick selection, but greater flexibility is achieved by allowing the user to also create your own units with simple text entry from the **MMS3000** keypad. Along with your standard transducers the **MMS3000-GP** Series can measure, display and record virtually anything.

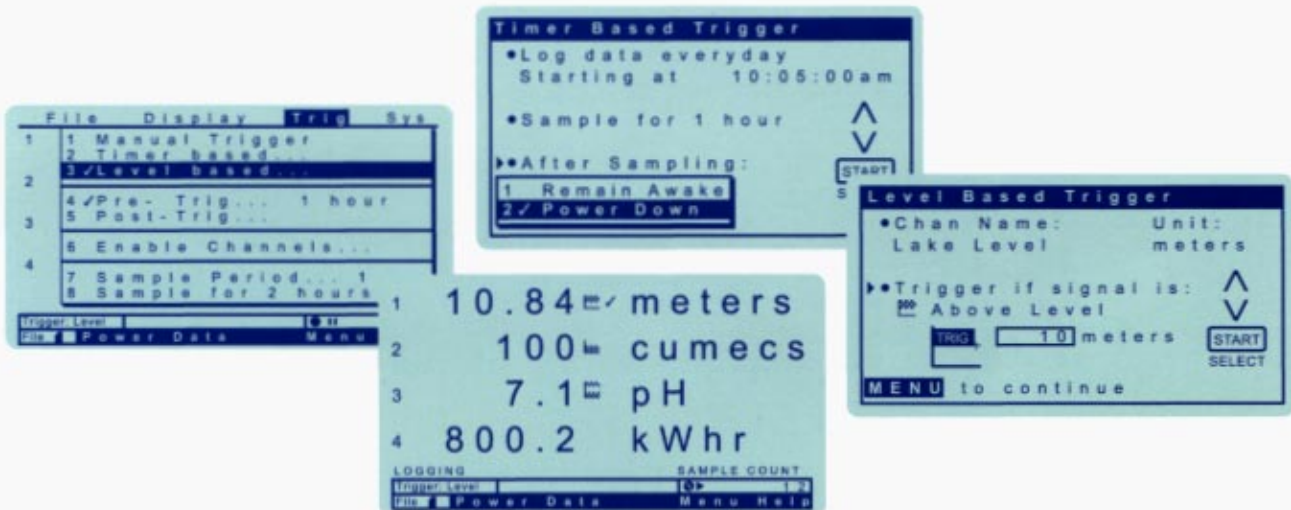
Do you need to review data in the field or on the plant floor away from the PC? Then the **MMS3000-GP4** and **GP8** are your instruments of choice. The large LCD enables you to graphically review recorded data by simply pressing a few keys.

## Key Features

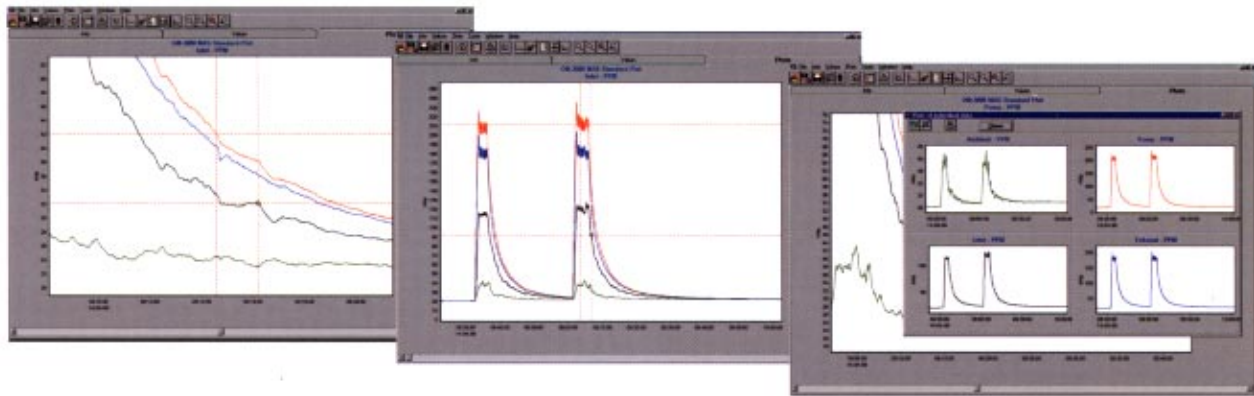
- ◆ **MAS™** Windows® based software included
- ◆ 24 bit A/D converter
- ◆ RS232 Interface with cable
- ◆ 4.3" x 2.3" (100mm x 60mm) LCD screen
- ◆ **PROFLASH™** upgradeable firmware
- ◆ C E approved
- ◆ 3 YEAR WARRANTY
- ◆ 512 Kilobyte non volatile memory (Approx 400,000 samples)

## New Features

- ◆ Drop-down menu navigation
- ◆ Constant background monitoring
- ◆ Sleep Mode for extended recordings
- ◆ Greater Math Functions in **MAS™**
- ◆ User adjustable span/offset settings
- ◆ Event/Time-based triggered recordings
- ◆ Folder-based file management
- ◆ Long-life Nicad battery pack



# MAS™ - Windows® Based Software



Windows®based software for flexible data manipulation.  
Producing a variety of graphs & printout options.  
Data can be easily exported to Excel and other programs.  
Fully functional demonstration copies of MAS available.

## No Measurement Boundaries

Many people choose single-purpose data loggers since they are expected to be more convenient and less expensive than their more feature-packed cousins. In the long run, however, you often end up sacrificing the ability to capture the 'whole picture' that is available when multiple process parameters or events are recorded at the same time. Multiple tests may then need to be taken, with a host of instruments at your side. Rather than offering any real savings, the result is that relying on a variety of single-purpose data loggers can actually end up costing you time, aggravation and money.

Wouldn't it be a welcome change to have a single easy-to-use product that is flexible enough to suit all your data logging needs? Wouldn't it be even better if this single product would easily fit into your data acquisition budget? The **MMS3000-GP** Series is the answer you have been looking for. Below are some of the many, process variables that are compatible with the **MMS3000-GP** Series:

- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"><li>• Pressure</li><li>• Light Intensity</li><li>• Displacement</li><li>• pH</li></ul> | <ul style="list-style-type: none"><li>• Temperature</li><li>• Flow Rate</li><li>• Velocity</li><li>• Position</li></ul> | <ul style="list-style-type: none"><li>• Relative Humidity</li><li>• Level/Depth</li><li>• Force/Load</li><li>• Power/Current/Voltage</li></ul> |
|--|---|--|

## Complete Package Includes;

1. **MMS3000-GP4™** or **GP8™** Data Logger
2. **MAS™** (Measurement Analysis Software)
3. Owners Operation Manual
4. 120VAC Adapter/Charger (220V optional)
5. Download Cable
6. Protective Outer Boot

**PROFLASH™**  
Upgradeable Internal Firmware

The diagram shows a globe labeled 'Internet' with an arrow pointing to a desktop computer system (monitor, tower, keyboard). Another arrow points from the computer to a handheld data logger device.

No IC's To Change - No Shipping hassles.

# Data and Specs for the MMS3000 Model GP4 and GP8

Specifications	Model: <b>MMS3000-GP4 &amp; GP8</b> 4 & 8 Current Loop Input Channels	Remarks																									
<b>Current Range</b>  Nominal current range Maximum current range	4 to 20mA 3.2 to 24mA	4mA corresponds to 0 units (units selectable in software), 20mA corresponds to full-scale indication. Offset and span are user-adjustable.																									
<b>Current Resolution</b>	2µA (1 part in 2,000 @ 4mA, 1 part in 10,000 @ 20mA)																										
<b>Current Accuracy</b>	± 0.1% of reading ± 5µA	Offset and span calibrated to nominal values. Instrument temperature 73 ± 18°F (23 ± 10°C).																									
<b>Engineering Units</b>	Metric and Imperial units for temperature, displacement, force, pressure, voltage, current, plus percentage. pico, nano, micro, milli, kilo, mega, giga, tera	User can create custom Engineering Units. Units and scaling are user-configurable.																									
<b>Minimum Sampling Interval</b>	Number of Channels (User-selectable)	Minimum Sampling Time (Seconds)																									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">GP4</th> <th style="width: 50%;">GP8</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">1</td><td style="text-align: center;">1</td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">2</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">4</td><td style="text-align: center;">4</td></tr> <tr><td></td><td style="text-align: center;">5</td></tr> <tr><td></td><td style="text-align: center;">6</td></tr> <tr><td></td><td style="text-align: center;">7</td></tr> <tr><td></td><td style="text-align: center;">8</td></tr> </tbody> </table>	GP4	GP8	1	1	2	2	3	3	4	4		5		6		7		8	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td style="text-align: center;">0.2</td></tr> <tr><td style="text-align: center;">0.3</td></tr> <tr><td style="text-align: center;">0.5</td></tr> <tr><td style="text-align: center;">0.6</td></tr> <tr><td style="text-align: center;">0.7</td></tr> <tr><td style="text-align: center;">0.8</td></tr> <tr><td style="text-align: center;">0.9</td></tr> <tr><td style="text-align: center;">1.0</td></tr> </tbody> </table>	0.2	0.3	0.5	0.6	0.7	0.8	0.9
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<p><b>Minimum time to scan <u>all</u> selected channels, not each channel.</b>                      Sampling interval is programmable from 0.2 seconds to 60 hours.                      Model GP4 has 4 channels only.</p>																											
<b>Data Logging</b>  Data Storage Format  Data Storage  Folder Name	Up to 50 named folders Multiple files per folders Up to 59,999 data points per file 512 kilobytes – approximately 400,000 individual samples  Up to 16 alphanumeric characters	User-specified name entered from keypad. Each file has unique time and date stamp. <b>MAS</b> plots limited to 15,000 samples per channel. Non-volatile memory (with battery backup). Number of samples depends on number of folders and files.																									
<b>Display</b>  Resolution Viewing Area Backlight	LCD with Graphic capabilities 240 x 128 pixels 4.3" x 2.3" (110mm x 60mm) Electro-Luminescent																										
<b>PROFLASH</b>	Allows internal firmware to be upgraded via built-in serial port	Download firmware upgrades via the Internet																									
<b>Communications</b>  Baud Rate	RS232 - 15kV ESD Protected. 9600, 19200, 57600 bits per second	Cable with DB9 connector included. Automatic Baud Rate Selection																									
<b>Input Termination</b>	Screw Terminals, 5mm pitch, 2.5mm wire size	4 pairs for model GP4, 8 pairs for model GP8.																									
<b>Loop Burden</b>	Maximum 6 Volts at 20mA loop current																										
<b>Isolation</b>	Optically Isolated	Between each current loop input and between each current input and instrument outputs e.g. RS232 port. The instrument is not intended for connection to "live" surfaces (voltage exceeding 50 VDC or 32 VAC).																									

<b>Battery</b>  Type Voltage Capacity Operating Time	Custom Nickel-Cadmium pack 7.2 Volts nominal 1500 mAh nominal 13 hrs with backlight off, 7 hrs backlight on - nominal	
<b>Charger &amp; Conditioner</b>  Fast Charge Rate Discharge Rate	Built-in dual rate charger – Automatic and Manual control 0.7A nominal 0.5A nominal	AC Adapter included (13.5 ± 1.5 VDC, 1A output) 2.5 hours for complete charge nominal Combats NiCad battery memory effect
<b>Mechanical</b>  Size Weight	9.7"W x 6.1"L x 3.0"H (247mm x 154mm x 75mm) 4.4lb (2kg)	Including protective boot Including protective boot and strap
<b>Environmental</b>  Temperature/Humidity Operating Storage EMC	32°F to 122°F (0°C to 50°C) / 70% RH 32°F to 86°F (0°C to 30°C) / 80% RH 14°F to 140°F (-10°C to 60°C) / 95% RH EN50081-1 EN50082-1	Non-condensing Non-condensing  Radiated and conducted emissions ESD Immunity and RF field immunity (EMI).

The manufacturer reserves the right to modify specifications without prior notice  
(Rev 1.06-web)



<http://instserv.com>

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