

Programmable, Digital Force Gauge with Remote Sensor – Series ZPS-LM



- 1,000 data/second True USB output, not just the peak
- Record and zoom in to analyze data with ZP Recorder software
- RS-232C, Digimatic and Analog outputs
- LM button sensors are less than 1.5" in both diameter and height and measure compression only
- Programmable high/low setpoints with color-coded LED indicators and output signal for go/no go testing
- 1,000 Data memory for computer download
- External switch display hold and clear
- lbf, kgf, and N units are selectable
- Runs on internal Ni-MH batteries or AC adapter
- Ergonomic design with non-slip rubber grip, heavy duty metal construction
- Capacity up to 4,400 lbf
- Overload capacity 200% of F.S.
- Real time and peak mode (selectable)
- Overload indicator and output signal
- Low battery indicator
- Reversible display
- ZPS kits include 6' cable, AC adapter/charger, carrying case, ZP Logger (basic data acquisition software), USB driver and USB cable.

DPU Sensors are Available

ZPS-DPU sensors measure both tension and compression in the same ranges as ZPS-LM sensors.



[Dimensions](#) | [Data Acquisition](#)

USB Output - High Performance

ZPS-LM digital force gauges are capable of processing 1,000 data/second, so force profiles can be analyzed for much more than just the peak. Collect peak data on your computer with the USB cable and ZP Logger (included) or 1,000 data/second with ZP Recorder (optional).

Main Features

The ZPS-LM are high performance digital force gauges that feature a separate sensor that is ideal for confined spaces or difficult to reach measurements. All standard LM sensors are less than 1.5" in both diameter and height and measure compression only. A standard six foot cable connects the gauge to the sensor.

ZPS-LM gauges have programmable high/low setpoints for go/no-go testing. Orange lights up for measurements less than Low setpoint, green for between High and Low setpoint, and red for over High setpoint.

Use real time mode to display load transients, or peak mode to capture the peak force achieved during a test. Selectable lbf, kgf, or Newtons measuring units. Store up to 1,000 values in memory and download to your computer using USB or RS-232C output.

ZPS-LM gauges are sold in kits which include a hard plastic carrying case, AC adapter/charger, 6' cable, and extension rod), Ni-MH rechargeable batteries, USB Driver and ZP Logger, and USB cable.

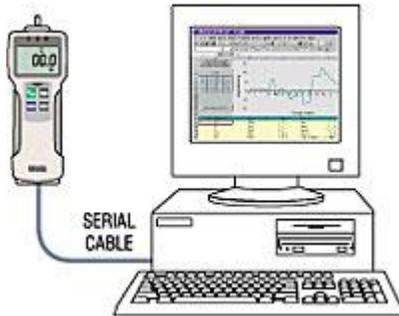
ZP Logger Software (included)

ZP Logger is a USB software utility that logs force values by pressing the Send button on the gauge, from either Peak or Real time modes. ZP Logger also downloads all values previously stored in gauge memory and saves in CSV format.

ZP Recorder Software (optional)

ZP Recorder is force data analysis software designed to interface with Imada ZP Series (USB) force gauges. ZP Recorder records and processes 1,000 data per second (not just the peak) and generates a graph with statistics. Zoom into any part of the graph to see individual data points at intervals of 1mS. Mouse over data points to display their force value.

Further analysis can be done on the entire range or by selecting part of the graph to detect the first peak or generate statistics within that time interval. Compare and align multiple graphs. Save graphs or export data to CSV format.



ZPS-LM Specifications

Accuracy	±0.2% ±1 LSD
Selectable Units	Pounds, Kilograms or Newtons
Overload Capacity	200% of F.S. (Overload indicator flashes beyond 108% of F.S.)
Power	Rechargeable Ni-MH battery pack or AC adapter
Battery Indicator	Battery icon flashes when battery is low
Memory	Non-volatile, recall up to 1,000 loads
Setpoints	Programmable high/low setpoints with color-coded indicators and output signal
Outputs	USB, RS-232C, Digimatic and ± 2 VDC analog output
Operating Temp.	32° to 100°F (0° to 40°C)

ZPS-LM Ranges (Resolution)

Accuracy: ±0.2% F.S. ±1 LSD

Model	Capacity (Resolution)		
	Pounds/Ounces	Kilograms/Grams	Newtons
ZPS-LM-0.4	7.000 (0.001 ozf)	200.0 (0.1 gf)	2.000 (0.001 N)
ZPS-LM-1	18.00 (0.01 ozf)	500.0 (0.1 gf)	5.000 (0.001 N)
ZPS-LM-4	4.400 (0.001 lbf)	2.000 (0.001 kgf)	20.00 (0.01 N)
ZPS-LM-11	11.00 (0.01 lbf)	5.000 (0.001 kgf)	50.00 (0.01 N)
ZPS-LM-44	44.00 (0.01 lbf)	20.00 (0.01 kgf)	200.0 (0.1 N)
ZPS-LM-110	110.0 (0.1 lbf)	50.00 (0.01 kgf)	500.0 (0.1 N)
ZPS-LM-220	220.0 (0.1 lbf)	100.0 (0.1kgf)	1000 (1N)
ZPS-LM-440	440.0 (0.1 lbf)	200.0 (0.1kgf)	2000 (1N)
ZPS-LM-1100	1100 (1 lbf)	500.0 (0.1kgf)	5000 (1N)
ZPS-LM-2200	2200 (1 lbf)	1000 (1kgf)	10.00 (0.01KN)
ZPS-LM-4400	4400 (1 lbf)	2000 (1kgf)	20.00 (0.01KN)