

## Digital Force Measuring System Model KMG

- For Tension and Compression Measurements
- For portable use or permanent installation
- Reference System for Calibration of our Testers



**KMG Force Measuring Device**



**Deliverable Force Transducer SM in accordance to code list**

### Model Range KMG:

Code	Indication Range [N]	Resolution [N]
5	0 - 50	0.005
10	0 - 100	0.01
20	0 - 200	0.02
50	0 - 500	0.05
100	0 - 1000	0.1
200	0 - 2000	0.2
300	0 - 3000	0.3
500	0 - 5000	0.5
1000	0 - 10000	1

### Technical Specifications:

#### Model Designation: KMG

Indication Range [N]: 50/100/200/500/1000/2000/3000/5000/10000 N.

Resolution: 10000 increments, see overview  
 Rel. accuracy error  $\leq \pm 0.1\%$  F.S.  $\pm 1$  digit

#### KMG Unit:

Dimensions: W×D×H ca. 170×160×30 mm;  
 Weights: ca. 500 g;  
 Material/Color: anodized aluminum casing;  
 Load Cell: see SM description  
 Connection: 15-pin. SUB-D-HD15 connector  
 Power Cable: ca. 1 m (or specification)

#### Measurement System:

Power supply: external 24 V DC (plug-power supply);  
 Plastic adapter box for connecting of the SM force transducer including all connectors.

#### Evaluation:

16 bit AD-converter, configurable microcontroller,  
 Operating Modes: Roll mode and Peak mode;  
 Internal update rate: ca. 10000 Hz; automatic zero point correction; Tare compensation up to 25 % of resp. load cell capacity; Optical and acoustic overload indicator (Piezo transducer); Internal memory for about. 100 measurements; real-time clock with date; Setup menu for internal parameter setting and automatic adjustment in several password protected levels; Single and listing printout via RS232 serial port; 9-pin.

#### Display:

LED backlight QVGA TFT-touchscreen-display, 115×86mm.  
 LCD update rate: 60 Hz.

#### Base:

Aluminum holder for a 40° inclination of control unit.

**Serial Port:** RS232C 1,200-115,200 Baud, 8 data bits, 1 stop bits; **Ethernet** interface optional

### General Information:

The digital force measuring system KMG is a handy device for measurements of tensile and compressive forces and/or weights. The force measuring system consists of the KMG (contains the electronics and the display for operation) and a remote load cell which is connected with the KMG via a detachable cable. The small size allows both, the mobile application and the stationary assembly in nearly any place. The system is characterized by its accuracy, high measurement resolution and ease of use. Despite its small size, the measurement and evaluation system also provides a variety of functions and settings. A 40 degree table stand is included.

- High measuring rate to ensure good measurement accuracy even in difficult application problems.
- Local independent battery power.
- Easy to read LCD display.
- Tare compensation.
- 2 operating modes: peak and roll mode
- Adjustable presets.
- Serial interface with adjustable parameters.
- Measured value memory.
- Setup menu for parameter selection.
- Real-time clock for printout with date and time.
- Best use in combination with the Software mavCALIB.

The KMG is an interchangeable load cell gauge with the capability of utilizing up to 8 different capacity load cells with a single gauge body. The KMG device automatically detects when you connect a load cell and then loads the specific factory-programmed parameters.

