

GAD SERIES

LARGE DIGITAL DISPLAYS

FEATURES

- Suspension-Mounted large LED Display
- Digit Heights: 57, 102, 150, 200, 300 & 400 mm
- Protection Class IP65 (sealed)
- Fully Corrosion Resistant
- Adjustable Brightness
- Power Supply: 95...265VAC (optional 11...30VDC or 48VAC)
- Input: 0...10V, 0...5V or 0...20mA, 4...20mA
- Fully scalable in kg, t (ton), kN, and other engineering Units
- Auto-TARE function
- Optional Voltage (0-10V) or Current (4-20 mA) Analog Output



Fig. 1: GAD 6, digits height 102mm - Large Digital Display

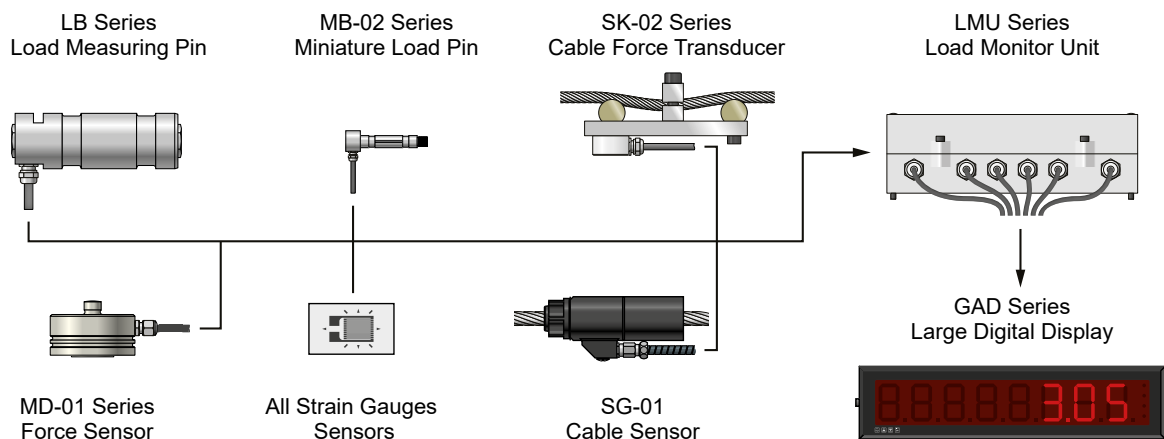
DESCRIPTION

These high quality, large character digital displays can be used for crane weight display, process weight display, and all other remote weighing applications. They use microprocessor based technology for high reliability and have a non-volatile memory to store all the calibration data.

LOAD-FORCE-WEIGHT SYSTEMS

Magtrol Large Digital Displays are used with Load Monitoring Units (LMU Series) or signal conditioners (AN Series), as part of a complete measurement system. Magtrol load measuring pins, which measure load and force to provide overload protection, are available for a wide range of Load-Force-Weight, and in various executions and accuracy classes. Combined, these products constitute an ideal safe measurement system for continuous overload monitoring.

SYSTEM CONFIGURATION



SPECIFICATIONS

SIGNAL PROCESSING

Voltage Input Range	0...10V / 0...5V / 1...5V
Voltage Input Impedance	1M Ω
Current Input Range	0...10mA / 0...20mA / 4...20mA
Current Input Impedance	33 Ω

MEASUREMENT DISPLAY

Type	7 segments
Display Definition	-1999...9999 (4 digits) or -199999...999999 (6 digits)
Digits / Color	4 or 6 digits / red
Scaling	Digital zero and full scale adjustable by programming keys
Decimal Point	Position adjustable by programming keys
Filtering / Signal smoothing	Time constant adjustable between 0 and 25 seconds
Count-by Function	Round-off of the last digits with steps of 1, 2, 5, or 10
Brightness & Readability	GAD Series are primarily intended for indoor applications. Outdoor models, with enhanced luminosity, are available on request.

ACCURACY

Maximum error	$\pm 0.05\%$ of full scale
Stability	± 25 ppm/ $^{\circ}$ C (full scale) and ± 30 ppm/ $^{\circ}$ C (offset)
Reading rate	10 readings / second
Response time	0.1 second

POWER SUPPLY

AC Power Supply	95...265VAC, 45/60Hz ^{a)}
Optional DC Power Supply	11...30VDC
Power Consumption	50VA max.

MECHANICAL CHARACTERISTIC & ENVIRONMENT

Operating Temperature	0 $^{\circ}$ C...+50 $^{\circ}$ C ^{b)}
Storage Temperature	-20 $^{\circ}$ C...+70 $^{\circ}$ C
Protection Class	IP65 (IP66, with stainless steel enclosure is available on request)

a) Optional 48VAC

b) Optional -25 $^{\circ}$ C...+50 $^{\circ}$ C

RELATED PRODUCTS

LB & LE SERIES - LOAD MEASURING PINS

LB & LE Series Load Measuring Pins are used to measure load, force and to provide overload protection. The pins are mounted in place of normal shafts and fitted with strain gauges, allowing them to produce a signal proportional to the measured load. Manufactured in Switzerland, Magtrol's Load Pins are rugged with high resistance stainless steel and tight construction, designed specifically for use in hostile industrial environments.

LB & LE Series are used on cranes, hoisting gear, elevators, winches, and force measurement for regulation processes in industrial installations and machinery production. Moreover it is an ideal transducer to detect and measure forces in harsh, tropical, offshore, marine and harbor environments.



Fig. 2: **LB210 & LB217**
Load Measuring Pins

LMU SERIES - LOAD MONITORING UNIT

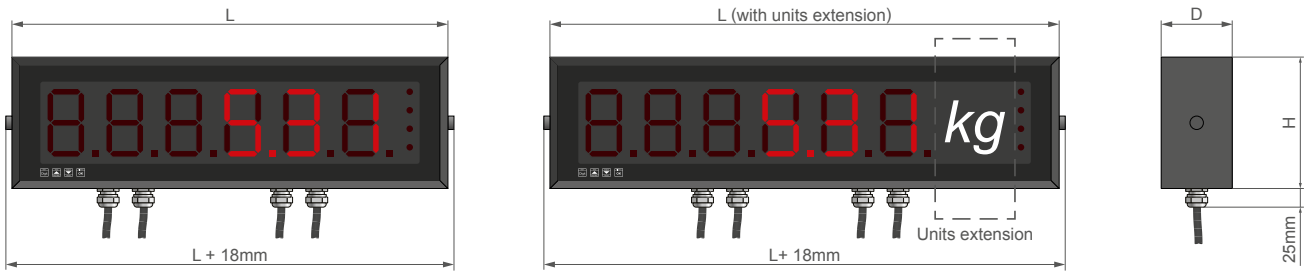


Fig. 3: **LMU 217** | Load Monitoring Unit

The Magtrol Load Monitoring Unit is specially designed for strain gauge transducer applications. Specifically developed for use with Magtrol load measuring pins and load-force-weight sensors, the LMU Series provides excitation current and amplifies the output signal of full-bridge strain gauges. Configurable relays and analog outputs are also available.

Its IP 65 aluminum housing allows the system to be used in harsh environments.

DIMENSIONS



MODEL	DIGITS	DIGITS HEIGHT	VIEWING DISTANCE	LENGTH		HEIGHT ^{a)}	DEPTH	WEIGHT	
				without units	with units			Without units	With units
GAD 057	4	57 mm (2.25")	25 m	279.5 mm	376 mm	154.5 mm	75 mm	1.25 kg	1.4 kg
	6			376 mm	504 mm			1.55 kg	1.7 kg
GAD 102	4	102 mm (4")	50 m	434 mm	616 mm	195.5 mm		2.5 kg	3.3 kg
	6			616 mm	824 mm			3.8 kg	4.6 kg
GAD 150	4	150 mm (6")	75 m	580 mm	820 mm	246.0 mm		4.0 kg	4.4 kg
	6			820 mm	1060 mm			4.7 kg	5.1 kg
GAD 200	4	200 mm (8")	100 m	750 mm	1072 mm	290.0 mm		5.2 kg	5.6 kg
	6			1072 mm	1395 mm			5.9 kg	6.3 kg
GAD 300	4	300 mm (12")	140 m	1050 mm	1540 mm	408.0 mm		n/a ^{b)}	n/a ^{b)}
	6			1540 mm	2022 mm			n/a ^{b)}	n/a ^{b)}
GAD 400	4	400 mm (16")	200 m	1368 mm	2020 mm	515.0 mm	n/a ^{b)}	n/a ^{b)}	
	6			2020 mm	2672 mm		n/a ^{b)}	n/a ^{b)}	

a) The display height does not include the stuffing gland, which are approximately 25mm (1 inch) height

b) This data is currently not available; please contact our sales department

ORDERING INFORMATION

ORDERING NUMBER	GAD	-	/	---	/	-	/	-	/	-	/	-
4 or 6	: Number of digits											
057, 102, ... ,400	: Digits height											
0	: None											
kg	: Kilogram											
t	: Tons											
kN	: Kilonewton											
other	: to be specified											
95-265 VAC	: SUPPLY											
48 VAC	: SUPPLY											
11-30 VDC	: SUPPLY											
0	: None											
I	: Current output											
U	: Voltage output											
0	: None											
C	: With calibration											

Example: GAD Large Digital Display, 6 Digits, digit height 150mm, with kN units, supply 12VDC, without output and calibrated would be ordered as : **GAD 6/150/kN/11-30VDC/0/C**