



MASS 5000

THE PORTABLE WEIGH IN MOTION SOLUTION

The MASS 5000 is a versatile portable weigh in motion system developed and manufactured by Mikros Systems. Accurate weights are displayed and stored by the system as a vehicle travels over the sensors at a low speed. Measurements include wheel, axle, axle combination and gross vehicle mass (GVM).

FEATURES

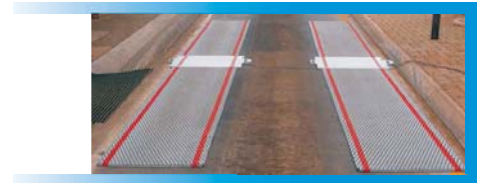
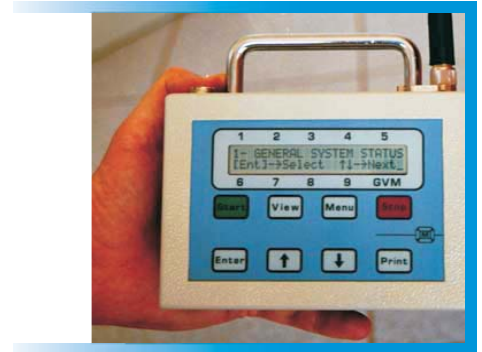
- **VERSATILE** – Sensor design allows for portable and semi-permanent installations
- **ACCURATE** – 1.5 % on GVM (at 1σ)
- **ROBUST** – Maximum capacity of 40 tons per axle
- **SIMPLE SET UP** – Deployed in 10 minutes
- **EFFICIENT** – Throughput of up to 60 trucks per hour
- **AUTOMATED OPERATION** – Weighing can continue without supervision
- **BATTERY OPERATED** – 16 hours continuous use on rechargeable batteries
- **PC COMPATIBLE** – Management software and image capturing features are available for enhanced data value
- **CHARGER SUPPLY** – 110/220V AC
- **RELIABILITY** – Rigorously tested for extreme African temperatures and conditions
- **LOCALLY MANUFACTURED** – Ensures efficient after sales and support

BENEFITS

- Efficient, accurate weighing solution for small and high volume requirements
- Optimized distribution of loads reduces maintenance, fuel and tyre costs
- Compliance to local regulations reduces or eliminates fines and prosecution by authorities
- Simplified bulk yard stock control
- Remote operation for valuable statistics

SYSTEM COMPONENTS

- Low profile load cell sensors
- Handheld terminal, 12V charger and cables
- Software for data management with image capturing feature
- Levelers
- Small impact printer, optional





MASS 5000 Specifications

PARAMETER	VALUES	REMARKS
Values measured	Wheel mass Axle mass Gross vehicle mass (GVM)	In metric or imperial tonnes with two decimals displayed.
Axles	Up to 20 axles per truck	
Operational accuracy		
Typical (1σ) error on GVM	±1.5%	Specification is for dual sensor system on surface that is in accordance to the ASTM E1318 specification. Accuracies obtained under normal operational conditions.
Typical (1σ) error Per axle group	±2.5%	
Maximum load per sensor	20t	
Surface Requirments		Paved, smooth, hard surface free of any protrusions.
Operational temperatures		
Sensor	-25 to +75°C	
Terminal	-10 to +65°C	
Speed	Up to 5km/h	Vehicle moves slowly and continuously over the sensors.
Set-up time	10 minutes	
Battery life	16 hours	Continuous use when fully charged.
Charging time	6 hours	Discharge cycle is used to extend battery life.
Internal batteries	Nickel Metal Hydride(NiMH)	
Charge-Mains/External	110-220v 12vDC	Backup power from a 12v source can be used.
Diagnostics	Battery life Sensor stability Over speed warning Imbalanced load warning	Current level and remaining life, indication. When a vehicle travels too fast over the sensors. When the left wheel load differs a prescribed ratio from the right.
Printer and PC interface	Serial (RS232) 19200 baud	Current results can be printed and stored information can be retrieved. (The last 1000 lines are stored)
Real time clock	Accuracy ±1 min/month@25°C	Each transaction is date and time stamped.
PHYSICAL PROPERTIES	DIMENSIONS (L x W x H) & mass	
Terminal in pouch	370 x 230 x 280mm 5kg	Pouch contains all interconnecting cables and operators' manual. Handheld terminal. Printer and accessories in carry bag. 110-220v Extruded aluminum High density PVC
Terminal	160 x 160 x 75mm 1,7kg	
Portable strip printer	280 x 160 x 180mm 1,5kg	
Mains charger	160 x 155 x 60mm 1kg	
Sensor	950 x 560 x 22mm 22kg	
Leveler (rolled out)	2 800 x 850 x 22mm 24kg	
Leveler (rolled up)	310 x 850 x 310mm	
Total mass		
Single sensor system	30 kg	
Dual sensor system	52 kg	
Trade Weighing & Enforcement		The Mass-5000L may be used for trade and law enforcement purposes if local regulations and standards allow for it.

Mikros Systems reserves the right to change this specification at any time without notice