

PEGASEM EBT

Speed Measuring Equipment for Escalators and Belts



Features

- Designed to measure on escalator handrails, moving stairs and conveyor belts
- High speed and distance resolution
- 4-digit LED display for speed, distance and stopping time
- Speed unit selectable from km/h, mph or m/s
- Analogue speed output
- Solid wheel stand for top-down or overhead operation
- Handle for manual wheel operation
- Quick and easy setup
- Operated from a rechargeable battery
- Battery charger included
- Comes in a special transport case including all accessories



Miniwheel 80 with P110 display measuring speed on an escalator handrail

Applications

- Precision escalator speed test on handrail and stairs
- Distance measurement
- Emergency brake test
- Escalator homologation
- Data acquisition on conveyor belts

The PEGASEM **EBT Equipment Kit** based on our Miniwheel-80 extends the scope of the PEGASEM speed sensor family to the low speed, high precision measuring range. Together with the P110 LED display it allows to acquire speed, distance and stopping time on escalators and conveyor belts. The high resolution of the speed measurement (0.01 m/s) can be used to check the correct speed ratio between handrail and staircase of an escalator. When connecting the signal from the

emergency button of the tested object to the trigger input of the display the stopping distance of a hand rail or belt can be measured with high resolution.



Measuring in top-down configuration

The wheel assembly is normally fitted to a solid stand with a heavy, rubber coated ground plate. A rotary spring keeps the wheel in touch with the moving belt. The wheel mounting style can quickly be changed from top-down to overhead.

For quick measurements where the highest precision is not required the wheel can be easily fitted to a handle and held on the moving object.



Wheel fitted to the handle

For transportation and easy usage the measuring system comes in a special case with tailored foam inserts.



It includes the wheel, wheel stand, handle, digital display, interconnection box, accumulator, battery charger, manual and cables.

Technical Data

for EBT Equipment Kit

Miniwheel 80			Remarks
Wheel Diameter	81	mm	
Maximum Speed v_{max}	30	km/h	
Pulse Rate	256		per revolution
Distance Resolution	1	mm	per pulse
Pulses per metre	appr. 1000		The exact value is documented on the factory calibration protocol.
Wheel cable length	5	m	
Connectors	Pull-pull type		Full metal miniature push pull connectors
Average contact pressure	10	N	adjustable
Construction material	Aluminium		
Wheel running surface	Rubber		3 rubber rings
Wheel mass (weight)	0.3	kg	
Wheel stand	2	kg	Iron base plate
Display			Remarks
Digit size	13	mm	4 digit high brightness LED display
Trigger input	1		An isolated external relay contact is recommended
Trigger cable length	2	m	
Operating modes	4		Speed, stopping distance, stopping time, wheel calibration
Analogue Output Voltage	1	V	per 1m/s. User scalable setting
Power Supply			Remarks
Rechargeable battery	7.2	V	6 NiCd cells
Battery capacity	3000	mAh	Allows for +6h of continuous operation
Battery charger input	100-240 50/60	VAC Hz	Automatic charger with wide input range



Messtechnik GmbH

Headquarters

An der Lach 11
D-86720 Noerdlingen / Germany
Phone +49 (0)9081- 604710
Fax +49 (0)9081- 604711
info@pegasem.com
www.pegasem.com