

DPG-Series Inclinometer

Measurement Specialties, Inc. (NASDAQ: MEAS) designs and manufactures sensors and sensor-based systems. MEAS has developed and commercialized inclinometer which works on the conductive fluid measurement principle. This principle offers in combination with a modern electronic technology a high zero point stability and an absolute long-term stability.



The DPG-Series dual axis conductive inclinometer in aluminum housing offers the user modern microprocessor technology with an integrated active linearization and temperature compensation. This inclinometer is full calibrated, easy to mount and absolute plug and play compatible.

This fully calibrated dual axis inclinometer system is available in three versions with measurement ranges of $\pm 5^\circ$, $\pm 15^\circ$ and $\pm 30^\circ$. The unit is adaptable and immediately ready for use due to it is simple cable wiring. The three point mounting surface eliminates the possibility of slippage during installation.

The RS232 interface of the unit, not only allows the user to read measurement data in digital form, but also allows the tilt sensor to be programmed and adjusted according to the user's needs. For example, zero point adjustment for the users' application or the individual setting of data transfer rate can be achieved. Further the user has the possibility to programmable a digital filter to reduce shock- and vibration influences during the measurement to get a stable output signal.

In order to satisfy customer demands, the tilt sensor system fulfils a series of requirements such as EMV, shock and vibration standards, protection class IP 67/68 in a small housing and as well as being CE certified.

Due to the robust structure with an operation temperature of -40°C up to $+85^\circ\text{C}$ this inclinometer can be used in rough environments e.g. road construction machines, truck chassis leveling, forklift truck for every type of leveling or inclination measurement.

Application Note

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- Road construction machines**
Automation technology is very important for road-construction machines, e.g. asphalt machines. For achieving an optimal result (= plane and horizontal street), sensors are becoming more and more important. Here they are mainly used for levelling the arm/finisher to the ground / asphalt surface.
- Truck Chassis Leveling**
During the loading/pick up a container a high force weigh heavily on the truck chassis. If the container will be loaded uncontrolled, the chassis could end in a precarious situation and tip over. The inclinometer offers the possibility to control the level of the chassis and send the information to the level customer control system of the truck.
- Forklift Truck**
A forklift is a suitable application for an inclinometer, which can be used for the leveling of the load arm during loading and/or during transporting the goods.
- Railway Track Control**
During build-up of a railroad line (or during maintenance) an inclinometer helps to optimize the leveling of the track to the right position.

ORDERING INFORMATION

NORTH AMERICA	EUROPE	ASIA
<p>Measurement Specialties, Inc. 1000 Lucas Way Hampton, VA 23666 United States Phone: +1-800-745-8008 Fax: +1-757-766-4297 Email: sales@meas-spec.com Web: www.meas-spec.com</p>	<p>MEAS Deutschland GmbH Hauert 13 D-44227 Dortmund Germany Phone: +49-(0)231-9740-0 Fax: +49-(0)231-9740-20 Email: info.de@meas-spec.com Web: www.meas-spec.com</p>	<p>Measurement Specialties China Ltd. No. 26, Langshan Road High-tech Park (North) Nanshan District, Shenzhen 518057 China Phone: +86-755-33305088 Fax: +86-755-33305099 Email: info.cn@meas-spec.com Web: www.meas-spec.com</p>

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