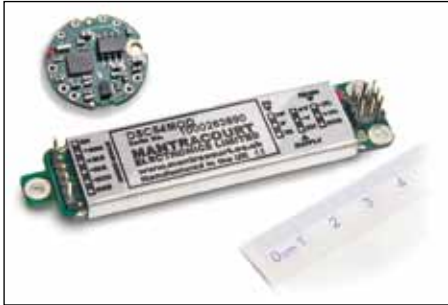




Condition Monitoring with Powerful Measurement & Sensor Technology



▲ Bus-capable digital measurement amplifier modules (Mantracourt)

The integration of wireless measurement modules into production plants enables processes to be controlled and monitored more efficiently. The laborious and cost-intensive laying of cables from the point of measurement to the data evaluation equipment is thus no longer necessary. Furthermore, measurement uncertainties or interruptions due to interfering radiation or cable breakage are a thing of the past. The modules provide a real-time

transmission of the measured data at a rate of up to 4 kHz from several nodes via the international, licence-free 2.4 GHz frequency band. The data logging rate reaches up to 2,048 kHz and the on-board flash RAM memory is only saturated after 1 million readings. Greater distances are no problem for these sensors either – 70 metres can easily be bridged without amplification, and with antenna amplification distances of up to 300 metres are possible.

Depending on the respective version, the so-called wireless sensor nodes are provided with four differential DMS signal inputs, 3 single-ended DC signal inputs & 1 internal thermocouple measuring channel (V-LINK®), and in case of the TC-LINK® series with 6 thermocouple measuring channels and one air humidity sensor. The cable-free orientation sensors make it possible to transmit data regarding yaw, inclination and roll angles as well as delta angle and delta velocity

»wirelessly« to a PC (Inertia-LINK®, 3DM-GX2®).

The digital DMS measurement amplifiers of the »DSC« series open up new, cost-efficient solution possibilities thanks to their field bus compatibility, when used in experimental strain analysis or in connection with DMS sensors. Due to an integrated field bus interface, the DSCs may be installed directly near to the DMS measuring points and communicate with the computer system via only one single RS485 2-wire bus cable (max. 1200m length) – with up to 254 DSC DMS measurement amplifiers, using standard protocols.

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