



Burat & Klein  
Datentechnik GmbH

Module overview



**MessVerstärker**  
(Measuring amplifier)





## Measuring amplifier flexible and robust

- Sensor signal conversion
- For **MultiMessBox** / **TeleInspektor**® - Multi
- Robust metal housing
- High long-term and temperature stability
- For many measurement variables



For all common sensors we manufacture the suitable, computer-controllable measuring amplifiers, which convert the sensor signal for detection or, if necessary, convert it.

Due to the identical housings, they can be installed in the **MultiMessBOX** / the **TeleInspektor**® and can be exchanged or extended as required. The robust metal housing and the reliable electronics promise a high long-term and temperature stability. A power supply for connected sensors is integrated.



Module overview

Physical Size		MessModule	Supplementary information	Sensortype
	Current AC	PE11	<ul style="list-style-type: none"> <li>PE11 = Current measurement RMS value and time curve</li> <li>PF11 = Current measurement time course</li> <li>IS11 = Current measurements via internal or external shunt resistors</li> <li>Voltage measurements 1 ... 1000 mV; 4 adjustable filter stages</li> </ul>	IH11 / Mess-Shunt / current probe / hall- and other current - converter
	Current DC	PE11 / PF 11 / IS11		
	Current DC	IL11	<ul style="list-style-type: none"> <li>Measuring range : 0 / 4 - 20 mA</li> </ul>	Current output - for all analog sensors with integrated electronics
	Voltage AC	PE11	<ul style="list-style-type: none"> <li>PE11 = Voltage measurement RMS value and time curve</li> <li>PF11 = Current measurement with time course</li> </ul>	UG11
	Current DC	PE11 / PF11		
	Current DC	UD11 / UD12 / UD13	<ul style="list-style-type: none"> <li>UD11 = Converter from single-ended to differential input               <ul style="list-style-type: none"> <li>± 10 V Differential input range</li> <li>200 V Input voltage fuse</li> <li>With adjustable sensor supply</li> </ul> </li> <li>UD12 = Converter from single-ended to differential input               <ul style="list-style-type: none"> <li>6 Measuring ranges (300 mV ... 100 V)</li> <li>200 V Input voltage fuse protection</li> <li>100 V Common-mode voltage</li> <li>4 filter stages</li> </ul> </li> <li>UD13 = Converter from single-ended to differential input               <ul style="list-style-type: none"> <li>6 Measuring ranges (150 mV ... 50 V)</li> <li>200 V Input voltage fuse protection</li> <li>100 V Common-mode voltage</li> <li>4 filter stages</li> </ul> </li> </ul>	Voltage signal and for all analog sensors with integrated electronics
	Stretch	GB11	<ul style="list-style-type: none"> <li>Carrier frequency amplifier for</li> <li>Strain gauge half/full bridges (4-/6-wire technology)</li> <li>Voltage measurements up to 100 mV (in electrometer mode)</li> </ul>	Strain gauge
	Torque			
	Distance	TF12	<ul style="list-style-type: none"> <li>DC bridge amplifier for</li> <li>Strain gauge half/full bridges (4-/6-wire technology)</li> <li>Voltage measurements up to 100 mV (in electrometer mode)</li> </ul>	Inductive (displacement) sensors
	Rotation angle / path	UP11	<ul style="list-style-type: none"> <li>For potentiometric transducers (angle, displacement, etc.) and active sensors</li> </ul>	Potentiometer / inductive sensor
	Pressure / force	GB11	<ul style="list-style-type: none"> <li>DC bridge amplifier for</li> <li>Strain gauge half/full bridges (4-/6-wire technology)</li> <li>Voltage measurements up to 100 mV (in electrometer mode)</li> </ul>	Strain gauge
	Acceleration	UC11	<ul style="list-style-type: none"> <li>For ICP transducers for measuring dynamic quantities</li> </ul>	Piezo (ICP / IEPE)
	Speed / Flow rate / Frequency	FA11	<ul style="list-style-type: none"> <li>For active, passive and inductive frequency / speed sensors</li> </ul>	All sensors with Pulse - output
	Temperature	RT12	<ul style="list-style-type: none"> <li>For measurements with resistance thermometers</li> </ul>	PT 100, PT 500, PT 1000, NI 100, PCT, NCT, KTY, ...
		UT11	<ul style="list-style-type: none"> <li>For all common thermocouples</li> </ul>	Thermocouples e.g. NiCrNi



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