

# PMD<sup>®</sup> 2500 (patented) Precision Microwave Device

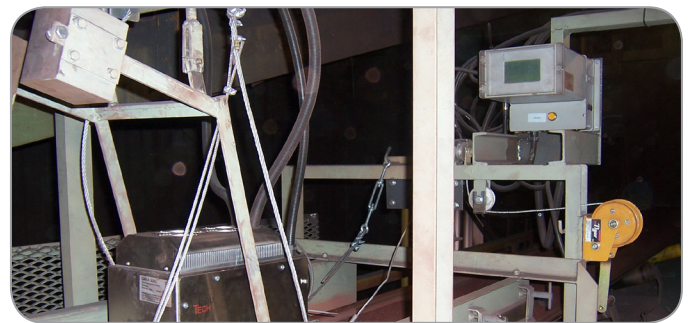


## New!

The patented PMD<sup>®</sup> 2500 Precision Microwave Device substitutes the PMD<sup>®</sup> 2450, the leading microwave moisture meter since 2001.

### To measure:

moisture | solid content | density | brix | carbon in fly-ash | a wide range of liquids and solids



## Advantages of the PMD<sup>®</sup> 2500 compared to the PMD<sup>®</sup> 2450

	PMD <sup>®</sup> 2500	PMD <sup>®</sup> 2450	Improved
Frequency range:	1.4 - 4.4 GHz	2.4 - 3.0 GHz	faktor 5
Long-term accuracy:	phase shift: 0.5 °/GHz attenuation: 0.1 dB	2°/ GHz 0.3 dB	faktor 4 faktor 3
Dynamik @ -10 dBm transmitting power:	110 dB	80 dB	faktor 1000

- Accurate moisture measurement especially for thin material layers as:  
gypsum board, wood board, ceramic plate, enabled by the improved long-term accuracy.
- Allows to start the measurement of lower loads.
- Accurate moisture measurement especially for thick material layers as:  
woodchips, iron ore, slurry with larger pipe diameters, moisture measurement of solids at belt with higher load, enabled by the increased dynamic range.
- Adaption to a wide range of applications enabled by expanded frequency range.
- Low transmitted power < 0.01 mW (10µW).
- Outdoor installations are possible:  
protective housing IP 66 (PMD 2450 IP 65).
- Separate transmitter, receiver and evaluation unit:  
Ergonomic and flexible installation of the evaluation unit up to 500 m away of the installation point.
- ATEX for zone 22 on request.
- Comfortable calibration with PC or laptop using the LDU Acquisition PC-Software. Remote Control for easy Service.

# Technical Specifications PMD® 2500

<b>Measuring Principle</b>	microwave-transmission measurement: the measured material is transmitted with microwaves.	both, attenuation and phase shift, caused by the material, are measured and evaluated.
<b>Set-up</b>	seperate units for:	microwave transmitter microwave receiver evaluation unit
<b>Cabinets</b>	microwave transmitter:  microwave receiver:  evaluation unit:	stainless steel, IP 66 / NEMA 4x, weight: 2.5 kg dimension: 150*300*80 mm ( H * W * D )  stainless steel, IP 66 / NEMA 4x, weight: 3.5 kg dimension: 200*300*80 mm ( H * W * D )  stainless steel, IP 66 / Nema 4x, weight: 9.0 kg dimension: 380*380*210 cm ( H * W * D )
<b>Microwave Transmitter and Receiver</b>	frequency range: max. transmitted power: Dynamic @ max. transmitted power: precision of the system:	1.2 - 4.5 GHz 0.1 mW ( -10 dBm ) 110 dB < 0.1 dB, < 0.5 °/GHz
<b>Evaluation Unit</b>	graphical display: touch screen:	114 mm x 64 mm, 128 x 256 Pixel 6 x 16 Matrics backlight with automatic shutdown.
	I/O	synchronisation with the signal measured at different positions.
	counter: - area weight compensation - tachometer	max. 6 counters, 16 bit opto-decoupled, pulse width > 0.5 µs voltage: 4.5 V - 30 V
	digital input signals: - measurement (start/stop) - sampling (start/stop) - batch (start/stop) - belt signal (start/stop) - type selection up to 16 types	8 digital inputs, opto-decoupled required input signal: potential free contact
	digital output signals: - alarm outputs - collective failure - sampling indication	4 digital outputs relays contacts: active (24V) or passive (contact)
	analog input signals: - area weight compensation - temperature	2 x 0/4 - 20 mA, or PT 100, 12 bit, in potential free with common ground for all I/Os optional potential free separate for each channel optional 0-10V inputs
	analog output signals	4 x 0/4 - 20 mA, 12 bit, in common potential-free optional potential free for each channel
	serial interface	1 serial interface, RS 232 or RS 485, potential free
	power requirement	90 - 260 Volt AC, 45 - 65 Hz, 2A
<b>Operating Temperature</b>	0 - 50°C	no condensation
<b>Storage Temperature</b>	-40 - 70°C	no condensation
<b>Sensors</b>		diverse antennas or flowcells-sensors

Certificate: ETSI, FCC, RSS, CE, optional ATEX for Zone 22 on request.



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