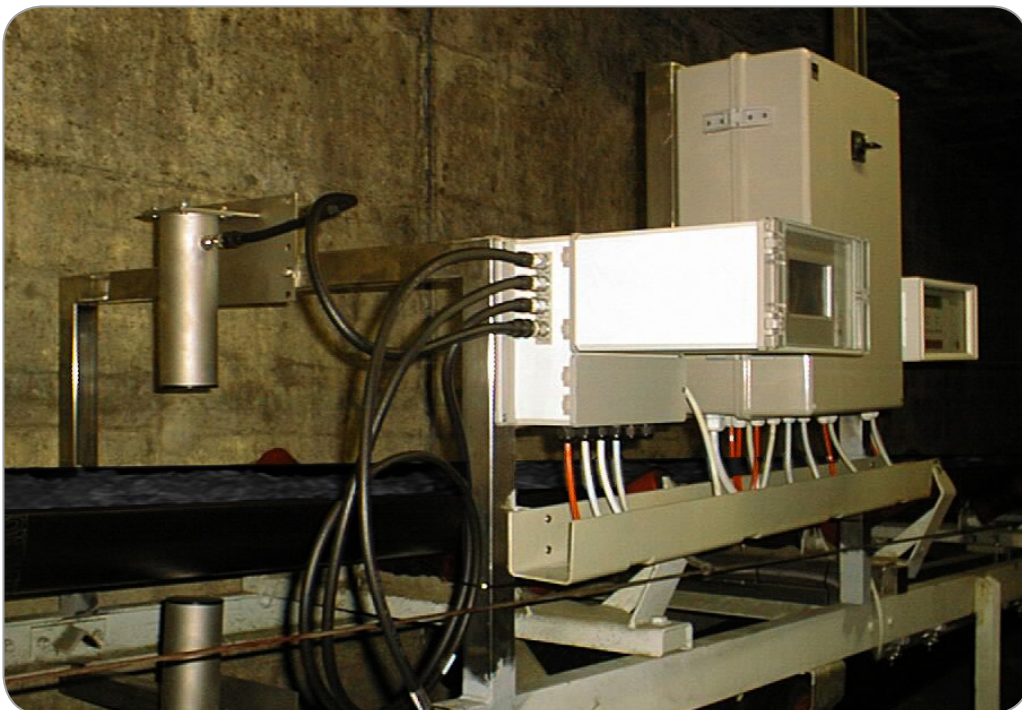


# Microwave Moisture Measurement of Coal and other Minerals



## Advantages:

- **Accurate**  
high selectivity on water
- **Inline**  
contactless measurement directly at the existing conveyors without extensive mechanical sampling devices
- **Representative**  
sensing of a large percentage of the material flow due to the transmission geometry. The whole volume, not only the surface is analyzed
- **No radio active source**  
alternatively an electro-mechanical belt weigher or ultrasonic distance sensor can be used to compensate the variation of the load



# Technical Specifications PMD® 2450

Cabinet	protection: IP 65	weight: 9.0 kg dimension: 30.5*24*37.5 cm ( H * W * D )
Display	touch screen: 114 mm x 64 mm graphical display: 128 x 256 Pixel	display back light with automatical shut down touch screen Matrix: 6 x 16
Power Requirement	90 - 260 Volt AC, 45 - 65 Hz	
Measuring Principle	microwave-transmission measurement: The measured material is transmitted with microwaves.	attenuation and phase shift caused by the material is determined.
Microwave Unit	frequency: 2.4 - 3.0 Ghz transmitted power: < 0,01 mW dynamic range: 70 dB	precision: < 0.2 dB, < 0.3° / GHz synchronisation with optional weight compensation.
I/O	microwave	2 N-connectors for input and output 2 N-connectors for reference cable
	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	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 analog input, 12 bit, in potential free with common ground for all I/Os optional potential free separate for each channel optional 0-10 V inputs
	- analog output signals	4 x 0/4 - 20 mA analog out, 12 bit, in common potential-free optional potential free for each channel
	serial interface	1 serial interface, RS 232 or RS 485, potential free
Operating Temperature	0 - 50°C	no condensation
Storage Temperature	-40 - 70°C	no condensation
Sensor	various antennas or measuring cells	

## Remote service

is available for all instruments via modem or internet. This saves time and money.

**This device is also available with explosion protection for Zone 22.**



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