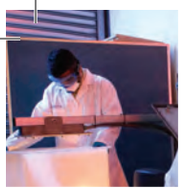
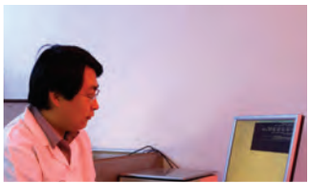
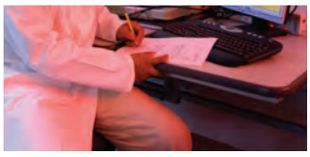
TECHNICAL

LFM³ 35 Specifications

Application				
Model Selection	**Material Attenuation**	**Moisture Content**	**Bed Depth**	**Accuracy**
LFM³ 35 H	Low	Dry	Shallow	Very high
LFM³ 35 S	Normal	Normal	Normal	High

Operational	
Conveyor width	Up to 1200 mm from mounting point to centre as standard
Conveyor speed	No Limit
Conveyor bed depth	Generally 25-400 mm but this is material, moisture range and application dependant
Material top size	Nominal 200 mm
Moisture range	Typically 1-25% but this depends on bed depth and material microporisity
Measurement time	Instantaneous, output as a rolling average updated at 1-10 second intervals
Performance	
Transmitted power	< 20 x 10^{-9} Watts
Attenuation	Resolution of microwave attenuation to 35 dB
Phase shift	Resolution of 3 deg of phase shift at 30 dB attenuation
Accuracy	For "S" antenna, typical accuracy is +/- 0.3wt% but this is application dependent. Accuracy is determined on wet basis at 1 standard deviation typical. These figures exclude the manual sampling precision of +/-0.1% typical
Display	
Type	Alphanumeric LCD 4 x 40 characters
Information	Time / Date Instantaneous moisture content Status
Outputs	
Standard plant interface	4-20 mA
Inputs	
Belt weigher	4-20 mA from beltweigher Linear mass or tonnes per hour compensation

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Electrical	
Power	110V (2A) or 240V (1A), single phase supply
Environment	
Operating temperature range	0-55º C with protection from direct sun (see sunshades in optional accessories below)
Humidity	0-95% relative humidity (non condensing)
Physical	
Low profile antennaes	340 x 320 x 10 mm "S" receiver: 165 x 165 x 10 mm "H" transmitter & receiver: 210 x 210 x 10 mm All antennae are 304 stainless steel and Lexan®
Electronics enclosure	IP54 Painted steel 600 x 600 x 220 mm (600 x 600 x 260 mm with optional heatshield)
Packaging	740 x 700 x 560 mm in sturdy wooden crate
Shipping weight	Approx 60 kg
Calibration	
Time-stamped sample data provided by plant	Recommend sampling to ISO standards. Where sampling is difficult Intalysis can provide mixed static and dynamic sampling methodologies.
Optical Accessories	
Heat shield & Sunshade	Recommended for outdoor applications
316 Stainless steel electronics enclosure	Recommended for dusty environments
Peaked sunshade	Recommended for dusty environments
Remote communications interface	PSTN, GSM, 3G (WCDMA) or internet used for downloading data and uploading calibrations. Allows ongoing remote support and software upgrade programs.
High gain cellular antennas	In areas where cellular coverage is poor
Software	
Software	Industry standard QNX operating system