Moisture Analyzers

PREMIUM AND MASTER Series 330 XM

High Resolution   Precision

Precisa

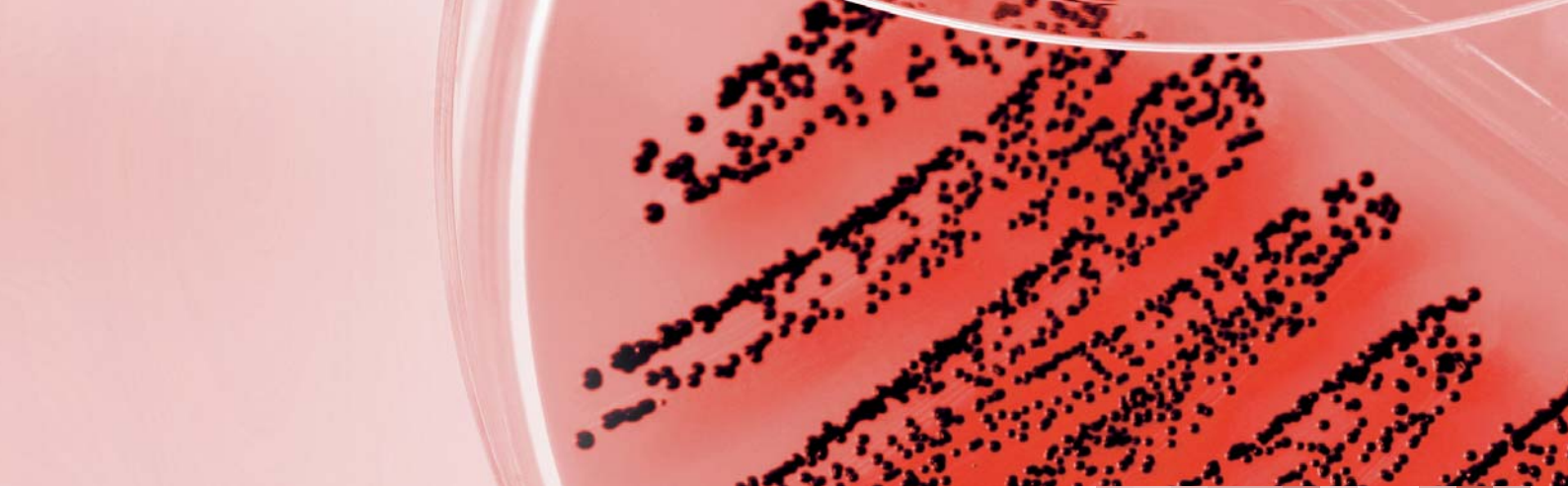**Moisture Analyzers from Precisa - for efficient measurements and accurate results.**

As the leading manufacturer of thermo-gravimetric analytical equipment, Precisa excels with an extensive range of moisture analysis equipment, meeting highest demands in research, production and quality control.

Moisture and water content have a defining influence on the quality and processing of materials, as well as on the price of raw materials and finished products in many industries including food, animal feeds, chemical and pharmaceutical products, construction materials etc.

The use of compact and robust precision moisture measuring instruments in the laboratory and in production increases efficiency and saves time and costs. Furthermore, productivity is enhanced by the fully automatic moisture analysis of samples, and the corresponding generation of measurement documentation.

All models of the Series 330 XM provide fast, error-free moisture analysis, using highest degrees of measurement performance and precision.

Simple to use and service-friendly to maintain, the Series 330 XM is the result of Swiss precision in engineering and production, which guarantees reliability, robustness and an extensive life of error-free operation at highest levels of precision.

Compactly styled design

3 different radiation heat sources are optional

Outstanding Touch Screen Display

PREMIUM
Precisa XM 120-HR

READABILITY 0.001%
The top-level PREMIUM CLASS unit, developed for the most demanding applications with a wide range of methods, fastest sample throughput and conforming to the most stringent international standards.

TOP QUALITY TECHNOLOGY
- Weighing technology which meets all international metrological regulations
- Weighing range 124 g
- Readability 0.1 mg / 0.001%
- High temperature range up to 230°C
- Temperature step of 1°C
- 3.4" touch-screen LCD backlit graphic display
- Graphic print-out (RS232 interface)
- Extended method memory capacity
- Choice of radiation heat source: halogen, infrared, dark radiator

USER FRIENDLY
- Pictogramm driven user guidance
- Variety of start-up and end-point control selections
- Three-phase drying for total control
- Easy access sample holder
- Practical construction to enable easy cleaning

QUALITY ASSURANCE
- Results printed in GLP guideline format
- Numerical and statistical analysis available
- Real-time observation in graphic display
- Fast sample throughput with optimum precision analysis

- **XM 120-HR KW** Special model for rapid gypsum analysis.

Robust and simple to operate

Easy sample access

Menu-driven, screen-guided applications

MASTER
Precisa XM 60-HR/XM 60/XM 66

READABILITY 0.001% - 0.01%
High-end MASTER CLASS units
for customers with limited number of methods.
These instruments are robust, provide a high
degree of precision and are simple to operate.

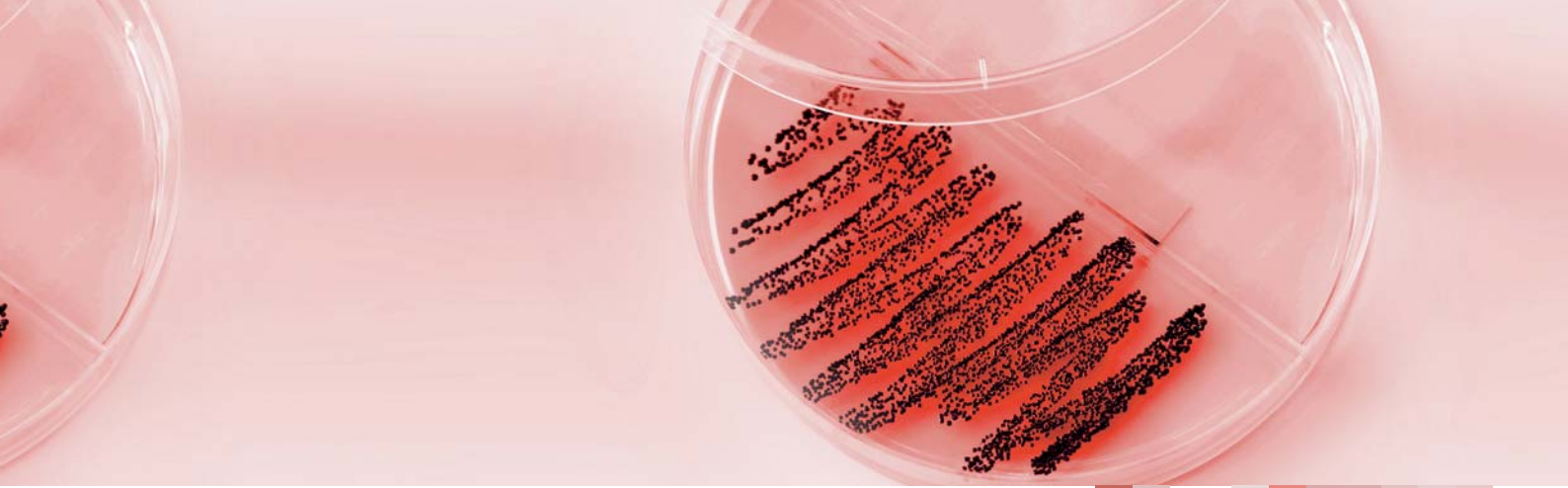### THE VERSATILE ALL-ROUND MOISTURE DETERMINATION SOLUTION
- Sturdy construction, perfect for all laboratory and production environments
- Weighing range up to 124 g
- Readability up to 0.1 mg / 0.001%
- High temperature range of 230 °C
- Temperature step of 1 °C
- Practical construction to enable easy cleaning
- High contrast, bright vacuum fluorescent display
- Memory storage of up to 20 methods
- Interface RS232
- Choice of radiation heat source:
  halogen, infrared, dark radiator

SIMPLE, FAST AND ACCURATE
- Variety of start-up and end-point control selections for optimum control
- Language independent prompts operated by symbol keys
- Easy access sample holder

QUALITY ASSURANCE
- Results printed in GLP guideline format
- Numerical and statistical analysis available
- Real-time results shown in display

- Special version without glass for the food industry

- **XM 66** with increased weighing range of 310 g and special software for the rapid moisture results for sewage and waste water treatment plants

PREMIUM Series 330 XM

[icons: Swiss made | LCD TS | External calibration | ABC 123 | 232 | IQ OQ PQ | Anti theft | Clock]

Model	Capacity	Readability	Repeatability		Linearity	Pan Size (mm/inch)
XM 120-HR	124 g	0.1 mg / 0.001 %	1 g / 0.1 %	10 g / 0.01 %	0.2 mg	Ø 100 / 3.9

MASTER Series 330 XM

[icons: Swiss made | VFD | External calibration | 232 | IQ OQ PQ | Anti theft | Clock]

Model	Capacity	Readability	Repeatability		Linearity	Pan Size (mm/inch)
XM 60-HR	124 g	0.1 mg / 0.001 %	1 g / 0.1%	10 g / 0.01 %	0.2 mg	Ø 100 / 3.9
XM 60	124 g	1 mg / 0.01 %	1 g / 0.2%	10 g / 0.02 %	1.5 mg	Ø 100 / 3.9
XM 66	310 g	1 mg / 0.01 %	1 g / 0.2%	10 g / 0.02 %	1.5 mg	Ø 100 / 3.9

STANDARD Series 330 XM

[icons: Swiss made | VFD | External calibration | 232 | IQ OQ PQ | Anti theft | Clock]

Model	Capacity	Readability	Repeatability		Linearity	Pan Size (mm/inch)
XM 50	52 g	1 mg / 0.01 %	1 g / 0.5%	10 g / 0.05 %	3.0 mg	Ø 100 / 3.9

Accessories	XM 330 Series
Aluminum dishes, Ø 100 mm, (box with 80 pcs.)	350-2032
Fibreglass-filters, Ø 90 mm, (box with 80 pcs)	350-4130
Temperature sensor plate (Sensor - type K)	350-8580
Temperature calibration set (Sensor - type K) with certificate	350-8585
Temperature calibration set (Sensor - type K) without certificate	350-8584
Stainless steel dish, reusable, Ø 100 mm, (1 pcs.)	330-2018
Calibration weight, 50 g	350-8241
Dust cover over display, set of 20 pieces	350-8590
Printer CBM910 230V - with cable and paper roll	350-8363
Printer CBM910 115V - with cable and paper roll	350-8370
Paper roll for Printer CMB910	350-8366
Ribbon for Printer CBM910	350-8367

Options	XM 120-HR	XM 60-HR	XM 60	XM 66	XM 50
Halogen heating system	standard	standard	standard	standard	available
Infrared heating system	available	available	available	available	available
Dark radiator heating system	available	available	available	available	standard
Application for rapid gypsum analysis	available	-	-	-	-

Features and Applications

[icon] Swiss made

[icon] 232 Interface RS232 for PC printer

[icon] ABC 123 Easy alpha-numeric input

[icon] LCD TS Touch screen LCD backlit graphic display

[icon] IQ OQ PQ Support IQ/OQ/PQ

[icon] Clock (Printout GLP/GMP, etc.)

[icon] VFD Vacuum Fluorescent Display

[icon] External calibration system

[icon] Anti theft protection - password and mechanical

Moisture Analyzers

PREMIUM AND MASTER Series 330 XM

Technical Specification	EM 120-HR	XM 120-HR	XM 60-HR	XM 60	XM 66	XM 50
Heat Source:						
Radiator type	Halogen / Infrared / Dark	Halogen / Infrared / Dark	Halogen / Infrared / Dark	Halogen / Infrared / Dark	Halogen / Infrared / Dark	Dark / Infrared / Halogen
Weighing system:						
Weighing range (g)	124	124	124	124	310	52
Pan Size (Ø mm)	100	100	100	100	100	100
Smallest sample weight (g)	0.2	0.2	0.2	0.2	0.2	0.2
Readability (g)	0.0001	0.0001	0.0001	0.001	0.001	0.001
Moisture Analysis:						
Readability (%)	0.001	0.001	0.001	0.01	0.01	0.01
Reproducibilty (%)						
at approx … g / …%	1 / 0.1	1 / 0.1	1 / 0.1	1 / 0.2	1 / 0.2	1 / 0.5
at approx … g / …%	10 / 0.01	10 / 0.01	10 / 0.01	10 / 0.02	10 / 0.02	10 / 0.05
Results calculations:						
100% … 0%	•	•	•	•	•	•
0% … 100%	•	•	•	•	•	•
ATRO 100% … 999%	•	•	•	•	•	•
ATRO 0% … 999%	•	•	•	•	•	•
g/kg	•	•	•	•	•	•
Risidual weight (g)	•	•	•	•	•	•
Weight loss (g)	•	•	•	•	•	•
Heating:						
Temperature range / Step (°C)	30 - 230 / 1	30 - 230 / 1	30 - 230 / 1	30 - 230 / 1	30 - 230 / 1	30 - 170 / 1
Intervals	3	3	boost + 1	boost + 1	boost + 1	boost + 1
Heating modes	standard, boost, smooth	standard, boost, smooth	standard, boost, smooth	standard, boost, smooth	standard, boost, smooth	standard, boost, smooth
Interval Switch-off (min)	0.1 - 99.9	0.1 - 99.9				
Interval Switch-off (%)	0.1 - 99.9	0.1 - 99.9				
Switch-off Criteria:						
Auto Stop (d/s)	freely definable	freely definable	freely definable	freely definable	freely definable	freely definable
Auto Stop (%/s)	freely definable	freely definable	freely definable	freely definable		
Timer Stop (min)	0.1 - 240	0.1 - 240	0.1 - 240	0.1 - 240	0.1 - 240	0.1 - 240
Minimum Stop (%)	0.1 - 99.9	0.1 - 99.9				
AdapStop	•	•	•	•	•	•
Sequence control system:						
Semi-Automatic	•	•	•	•	•	•
Standby temperature (°C)	30 - 100	30 - 100	30 - 100	30 - 100	30 - 100	30 - 100
Monitoring:						
Inspection window	•	•	•	•	•	
Buzzer	•	•	•	•	•	
Print-out:						
GLP	•	•	•	•	•	•
Print interval (min)	0.1 - 10.0	0.1 - 10.0	0.1 - 10.0	0.1 - 10.0	0.1 - 10.0	0.1 - 10.0
User texts	•	•				
Freely definable formats	•	•				
Sample numbering	•	•	•	•	•	•
Memory Capacity:						
Article (with all settings)	100	50	20	20	3 fix, 2 free	1
User texts	20	20				
Operation:						
Display	Graphics, LCD, backlit	Graphics, LCD, backlit	VFD, 20 characters, alphanumerical	VFD, 20 characters, alphanumerical	VFD, 20 characters, alphanumerical	VFD, 20 characters, alphanumerical
Keyboard	12 keys	various keys and a touch screen	10 keys	10 keys	10 keys	10 keys
Menu controlled	•		•	•	•	•
Sample feed	manual	manual	manual	manual	manual	manual
Password protection	•	•	•	•	•	•
Special Features:						
Weighing-in guidance	•	•	•	•	•	•
Statistics	•	•	•	•	•	•
Remote control (heater)	•	•	•	•	•	•
Ash residue	•	•	•	•	•	
Calibration:						
Balance	internal	external	external	external	external	external
Temperature	100°C und 160°C, selectable	100°C und 160°C, selectable	100°C und 160°C, selectable	100°C und 160°C, selectable	100°C und 160°C, selectable	100°C und 160°C, selectable
Miscellaneous:						
Clock for date and time	•	•	•	•	•	•
PC / Printer interface	USB	RS 232	RS 232	RS 232	RS 232	RS 232
Anti-theft protection	code and mechanical	code and mechanical	code and mechanical	code and mechanical	code and mechanical	code and mechanical

Technical modifications reserved

ISO 9001 BUREAU VERITAS Certification
N°189724