Versatile, Reliable Inspection

in Dry and Wet Applications



M31R StandardLine

The M31R metal detector delivers versatile, reliable inspection to help you meet industry standards and regulations. With advanced-level innovations in an entry-level package and the opportunity to upgrade in the future, it is the perfect choice for your cost-sensitive applications.

You get smart, digital technology packed into a rugged, hygienic design at an attractive price point.

This next generation metal detector is easy to use, set up and maintain. It also allows you to streamline your compliance processes with semi-automatic or fully automatic data collection methods.

- High sensitivity to all metal types in dry and wet applications
- Simple set-up in 33 languages with manual clustering for increased productivity
- Easy to integrate with a wide range of conveyor systems
- Flexibility to customize the solution to meet performance and budget needs



Versatile, Reliable Inspection in Dry and Wet Applications

- Easy to use, set up and maintain
- Smart, digital technology for enhanced process control
- High sensitivity to all metal types in dry and wet applications, powered by patented eDrive™ technology to detect smaller metal contaminants
- Affordable compliance

The M31R is the right choice for inspecting a wide range of products when your priority is achieving affordable compliance. Integrate it with a range of conveyor systems for a solution that can reliably inspect and effectively detect and reject metal-contaminated products, enabling them to be removed from the production line.



Smart, digital technology

Cutting-edge technology powered by innovative SENSE $^{\text{TM}}$ software, combined with advanced algorithms delivers better quality control.

- High detection capability for all metal types
- Excellent on-line stability
- Condition monitoring reduces unplanned downtime risk



Easy setup and operation

The M31R is designed for simple operation to deliver consistent, high-performance results for the life of the system.

- Simple operation via icon-driven menus
- Easy to learn auto-setup feature reduces downtime during changeovers
- On-board test reminder with pass/fail confirmation



Global service, local support

A global service network delivers local support, covering professional installation and service plans through to spare parts delivery.

- IPac Equipment Qualification
- Care Contracts
- Spare Part Kits
- Preventive Maintenance
- Certified Test Samples
- User Training
- Performance Verification





Upgrade to PlusLine functionality

Boost your productivity and make compliance easier with our optional PlusLine upgrade packs.

- PlusLine Productivity Pack delivers enhanced routine testing support, doubles the available product memories and increases the number of user accounts
- PlusLine Protection Pack offers a series of Alarm, Access and Detection Logs; remote bin lock/unlock; increased I/O to expand due diligence capabilities

Refer to separate Software Packs datasheet for full details.



Paperless record-keeping

Looking to increase efficiency and enhance sustainability? Streamline your processes and reduce costs with semi-automated data collection via USB, or automated data collection via $ProdX^{TM}$.

- Remove the need for paper records
- Simplify data storage and retrieval
- Increase data transparency
- Meet global standards and retailer codes of practice

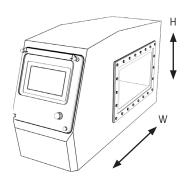
M31R StandardLine

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	Technical Details	M31R StandardLine
Sensitivity Features	Operating frequency	Tuned, single frequency operation up to 300kHz 3 user-selectable frequencies as standard (25 / 100 / 300 kHz)
	eDrive technology	Patented technology to improve sensitivity
	Standard aperture widths (W)	100 mm - 1900 mm*
	Standard aperture heights (H)	75 mm - 1000 mm*
	Mounting methods	Base, oversquare
Productivity Features	Human-machine interface (HMI)	7" WVGA touchscreen
	Languages (menus, prompts)	33; metric and imperial units
	No. of user accounts	Standard: 10; Upgrade: 50**
	Product memories	Standard: 100; Upgrade: 200**
	Setup	Simple auto-setup
	Performance Monitoring Routine (PMR)	PMR Alarm with 'test due' notification, PMR Pass/Fail Upgrade: PMR Wizard with guided routine and PMR scheduling**
	Condition Monitoring	Reduces unplanned downtime risk
Environment Features	Zero Metal Free Zone	Option (to reduce overall system length)
	Ingress protection rating	Light duty IP65; Medium duty IP66; Heavy duty IP69K
	Surface material and finish	Stainless steel SS304 bead-blast (as standard), SS316 brushed (optional)
	Operating temperature	-10 to 45 °C
	Electrical (metal detection head)	100 to 240 VAC (+10% / -15%), 50 to 60 Hz, max 220 W
Compliance Features	Logs	Standard: PMR Log Upgrade: Access Log, Alarm Log and Detection Log***
	Programmable inputs and outputs	Standard: 10 inputs and 6 outputs Upgrade: expandable to 16 inputs and 12 outputs
	Performance indicator	Color-coded bar graph and digital display; pack count; reject count
	USB Port	Yes – exports reports, facilitates system upgrades and software updates
	Due Diligence capability	Base Pack: in-feed pack sensor, air failure warning, bin-full warning rejected product confirmation / reject operation failure, head fault warning Plus Pack: Additional to Base Pack features - reject check warning and bin open warning***
	ProdX integration	Enabled
	Performance Verification	Option – Annual Performance Verification Service

^{*}Please contact your local METTLER TOLEDO Product Inspection sales representative for full specification details.

^{***}Upgrade option with SENSE PlusLine Protection Pack



The M31R metal detector head

The M31R is compatible with an extensive range of conveyor systems to create a fully-integrated, fit-for-purpose metal detection solution.

- Basic stop alarm systems
- Fully-automated reject devices
- Suite of failsafe devices, warnings and alarms

For information about conveyor system compatibility, system-specific technical specifications and due diligence features, please refer to the applicable **conveyor systems brochures** on our website.

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Mettler-Toledo Group

Product Inspection Division
Local contact: www.mt.com/contacts

www.mt.com/MD-M31R

For more information

^{**}Upgrade option with SENSE PlusLine Productivity Pack