

PERFECTION IN EVERY DETAIL

ZERO-ERROR REJECTION. SUPERIOR HYGIENE.
ERS & CEIA: PERFECT INSPECTION.



Detector Specifications

Model Series	THS/21ET-3F / MS 21
Technology	Single and Multi-Frequency Analysis
Protection Class	IP66 (Standard) / IP69K (Optional)
Suitable Environment	Dry, Wet & Standard Washdown Areas
Display	4 / 16-Button Keypad
Connectivity	Bluetooth, Ethernet, USB
Product Memory	250 / 500 Products
Detection Speed	Up to 30 m/s (Head capacity)
Operating Temperature	-10 °C ile +55 °C

Conveyor System

Frame / Body	AISI 304 Stainless Steel (Hygienic Design)
Roller Material	High-Durability Aluminum
Conveyor Height	350–1100 mm ±50 mm
Sliding Bed (Dry)	Phenolic Compact Laminate
Sliding Bed (Wet)	Solid UHMW-PE Plastic (Water-Resistant)
Belt Type	Modular Plastic or PU Belt (FDA Approved)
System Speed	Adjustable (e.g., 20–60 m/min via VFD)
Reject Mechanism	Pneumatic Pusher, Air Blow, or Flipper Arm
Reject Bin	Lockable Stainless Steel Bin (Secure Storage)
Power Supply	100–240 VAC, 50/60 Hz

Technical Specifications

We have combined CEIA's metal detection technology (manufactured in Italy)—recognized as one of the most advanced in the world—with ERS's robust and hygienic conveyor engineering. CEIA's patented MultiSpectrum Technology, unique in the industry, eliminates false rejects caused by product effect in applications such as fresh cheese, hot bread, or high-moisture meat products. Fully compliant with HACCP and FDA 21 CFR Part 11 standards, this system delivers an advanced safety and control solution for your production line.

Standard Equipment & Technology

Multi-Spectrum Sensitivity: Unlike conventional detectors, the MS21 analyzes the product simultaneously across a wide frequency spectrum. This allows true metal contamination to be clearly distinguished from the product's own signal (such as salt or moisture), effectively eliminating false alarms.

Hygienic Conveyor Design: The detector head is manufactured entirely from AISI 316L stainless steel (surgical grade). Compared to standard 304 steel, it offers significantly higher resistance to corrosion and aggressive cleaning chemicals.

Bluetooth Connectivity: System settings can be securely adjusted from a computer using dedicated software, without opening the control panel. This is ideal for installations in hard-to-reach locations or hazardous environments.

Auto-QC (Automatic Quality Control): The system can automatically verify its sensitivity at defined intervals, reducing the need for manual testing and eliminating human error.

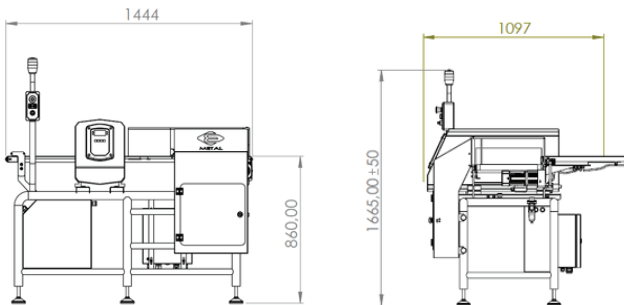
Seamless Integration: Supports Modbus, RS232, and Ethernet TCP/IP, enabling direct connectivity with ERP / MES systems.

Compliance & Process Safety

FDA 21 CFR Part 11: Maintains tamper-proof records for all actions and user logins, ensuring complete audit traceability.

Reject Confirmation: Cross-check sensors physically verify that contaminated products have been successfully directed into the reject bin.

Unauthorized Access Protection: Multi-level password protection and lockable reject bins prevent unauthorized access or intervention.



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