



IQ4M - Rectangular Metal Detector Search Head

Designed for Food & Packaging Industries

Metal Detection

The new IQ4M Multi-Spectrum, Variable Frequency metal detector search head is designed to inspect products for metal contaminants in the food and packaging industries. It can be purchased as a search head that can be integrated into a larger packaging line or as a standalone conveyor unit with automatic reject stations.

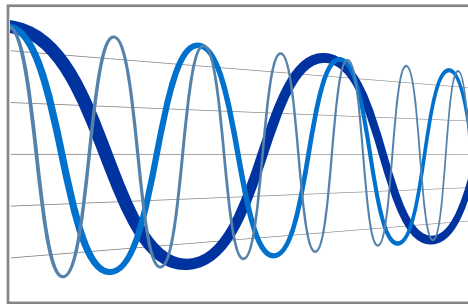
Product Highlights

- Multi-Spectrum detection exposes smaller contaminants across a wider range of metal types.
- Variable frequency technology provides the optimal contaminant detection performance for even difficult to handle metallized film packaging by ensuring the best frequency band is used for each product.
- RFID tag login for user accounts provide secure access to functions critical to each level (Operator, Supervisor, Quality and Engineer).
- OPC-UA communication offers improved data exchange for a wide range of system statistics.
- Improved frequency first auto-learn feature rapidly delivers great detection sensitivities out of the box and provides more line uptime than ever before.
- Faster recovery times from large contaminant detection & moving product to product reduces false positives, improving operational efficiency.
- Improved hardware noise suppression, gain balancing, and on-board fine tuning tools including DDS+ further help to improve detection.



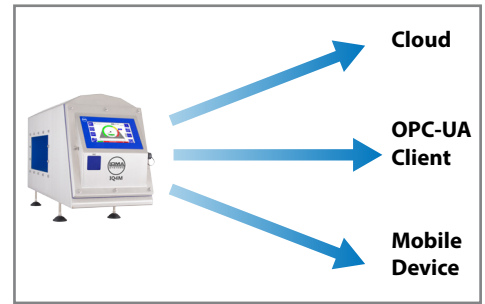
Enhanced Machine Security

Login via **programmable RFID tags** provides enhanced security and traceability, as well as speeding up the log in process.



Multi-Spectrum Detection

Detect smaller contaminants across a wider range of metal types with **Multi-Frequency Scanning**.

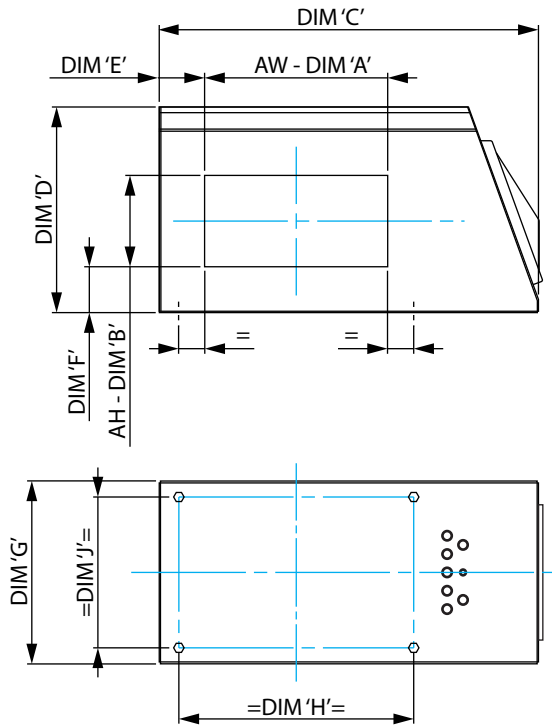


Improved Data Exchange

Communicating via the **OPC-UA** standard, the IQ4M offers **Industry 4.0 connectivity** with simplified data exchange.



Technical Specification



Dimension A = Aperture Width
Dimension B = Aperture Height

| | |
|--------------------------|--|
| Material of Construction | 304 Brushed stainless steel |
| True Variable Frequency | 34 to 1200 kHz |
| Supply Voltages | 85 to 265 V, single phase 50/60 Hz, neutral & Earth |
| Power Consumption | 20 VA |
| Temperature Range | -10 to + 40 °C (14 to 104 °F) |
| Humidity | 0 to 95 % Relative Humidity (Non-condensing) |
| IP Rating | IP69 |
| PVS Enabled | Yes |
| Ethernet Capability | Yes, OPC-UA, LomaData or TRACS |
| USB Capability | Yes |
| RFID Compatibility | 13.56 MHz - High Frequency |

Head Dimensions

| Preferred Aperture Width 'A' | 250, 350, 450, 550, 650, 750, 850, 950, 1050, 1150, 1250 | | | | | | | | | |
|-------------------------------|--|-----|-----|-----|---------|-----|---------|-----|---------|------|
| Preferred Aperture Height 'B' | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 |
| C | A + 430 | | | | A + 530 | | A + 670 | | A + 810 | |
| D | 392,5 | 400 | 450 | 500 | 650 | 700 | 850 | 900 | 1050 | 1100 |
| E | 100 | | | | 150 | | 200 | | 250 | |
| F | 130 | 100 | | | 150 | | 200 | | 250 | |
| G | 300 | | 400 | | 500 | | 600 | | 700 | |
| H | A + 114 | | | | | | | | | |
| J | 230 | | 330 | | 430 | | 530 | | 630 | |

All dimensions in mm. The table shows the most common aperture widths and heights only, and please note that not all aperture heights are available with the aperture widths stated. Other sizes, including custom sizes are available depending on your application. Please consult your local representative for any further information.

Other Features

- Full range of aperture widths and heights to suit products being scanned.
- 7" colour touchscreen with intuitive graphical user interface delivers easy setup and detection diagnostics.
- Rugged construction using brushed 304 stainless steel.
- Unique clam-shell designed case and coil geometry that delivers unsurpassed levels of immunity.
- Extensive data logging and reporting via USB or Ethernet for HACCP and retail compliance.
- 32-bit digital signal processing for enhanced contaminant detection.
- Can be integrated into a conveyor system to achieve Full Compliance Retail Specification.
- For horizontal mounting. Available in other configurations (including vertical mounting for tall products and with remote control box), please consult your local representative for further details.



An ITW Company

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