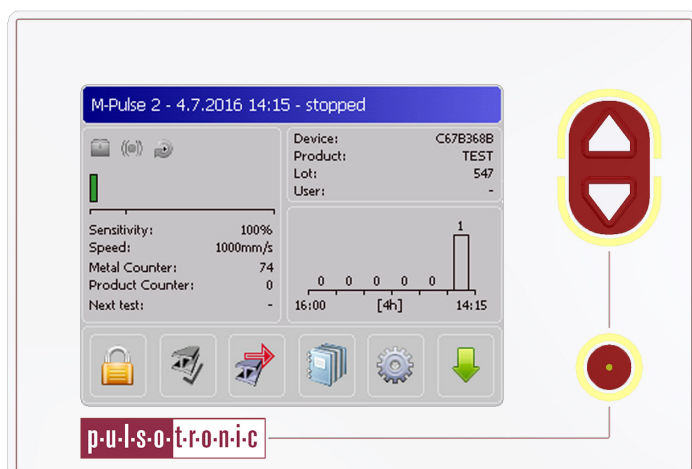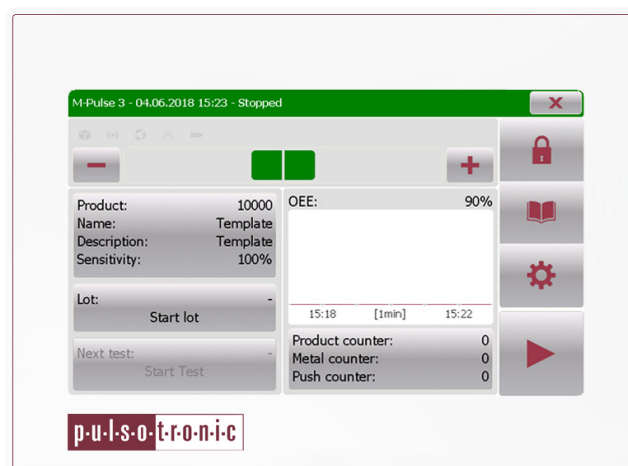# control unit

Type: M-Pulse2 / M-Pulse2pro

M-Pulse2

M-Pulse2pro

HIGH PRECISION IN METAL DETECTION

The **M-Pulse2 / M-Pulse2pro** control and evaluation electronics combine high metal sensitivity and reliability with simple operation. Due to modern electronics and the visual display of the teach-in of product effects, it is possible to achieve very good sorting results even with complicated products.

A variety of connection and expansion options create enough space to control any type of periphery or plant or to process commands.

The comprehensive user management and documentation of all data guarantee the M-Pulse2 / M-Pulse2pro successful use in quality control – for example in the food industry.

Modern receiver technology paired with effective signal evaluation collects all sensor data with the highest accuracy. The measured values are recorded with a resolution of up to 31 bits. Maintenance-free operation by means of automatic drift compensation and continuous internal self-diagnosis are standard features. All sensors from the product range of Pulsotronic-Anlagentechnik are supported. For applications with tunnel detectors, multi-frequency technology can be used. A multitude of different interfaces allow seamless integration into any manufacturing environment. The M-Pulse2 / M-Pulse2pro is available with Ethernet. In the process, all events can be logged and evaluated in accordance with HACCP, ISO or IFS. The UniControl software packages handles the archiving and evaluation of all recorded data and thanks to the versatility of the UniControl Software, other devices, such a Checkweigher, are also supported.

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ANLAGENTECHNIK

Type: M-Pulse2 / M-Pulse2pro

TECHNICAL DATA

Mechanical data	
Dimensions	W x H x L: 250 x 330 x 160 mm
Weigth	ca. 4,600 g
Handling	
Display & Keyboard M-Pulse2	5,7" – 320 x 240 TFT (65.536 colors) incl. touch and multifunctions- and arrow keys
Display & Keyboard M-Pulse2pro	7" – 800 x 480 TFT (65.536 colors) incl. Touch (optional with RFID)
Conditions of use	
Storage temperature	-10°C – 60°C
Operating temperature	0°C – 50°C
Protection class	IP 65
Supply voltage	85 – 264 VAC; 50/60 Hz alternativ: 24 VDC
Power consumption	typ. 15 W; max. 40 W
Electrical connection	3 m cable; L1,N,PE; 1,5 mm²
Sensitivity	(see sensor or device)
Interfaces	
Sensor - transmitter	50 Ohm; überlast- & kurzschlussfest (50 – 1.000 kHz)
Sensor - receiver	HDC-IQ - digital receiver (31 bit) with sensor-readjustment and monitoring multi-frequency technology (max. 4 frequency)
Digital inputs	8 pieces; optical isolated; V_{IL} = -5 – 1,5 V; V_{IH} = 6 – 50 V multifunction-key (function selectable)
Analog inputs	1 pieces; 0 – 10 V; resolution 10 bit speed
Digital outputs	7 outputs.; PNP-open collector; max. 1,000 mA; overload- & short circuit proof 2x device state, 2x ejection, 2x signal, belt run
Analog outputs	1 outputs.; 0 – 10 V; resolution 12 Bit; max. 10 mA overload- & short circuit proof desired speed
Relay	2x change-over contact; max. 230 V / 2 A
Network	Ethernet; RJ45; 10/100 MBit
Serial interface	RS232 (all types and formats)

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