



## M-PULSE2 / METAL SEPARATOR CONTROLLER

### PRINCIPLE OF OPERATION

M-PULSE2 COMBINES THE HIGHEST METAL SENSITIVITY WITH RELIABILITY AND USER FRIENDLY HANDLING. MODERN RECEIVER TECHNOLOGY PAIRED WITH EFFECTIVE SIGNAL EVALUATION COLLECTS ALL SENSOR DATA WITH THE HIGHEST PRECISION. COMPLETELY MAINTENANCE-FREE OPERATION BY MEANS OF AUTOMATIC DRIFT COMPENSATION AND A CONTINUOUS INTERNAL SELF-DIAGNOSIS ARE STANDARD FEATURES. ALL SENSORS FROM THE FOREMOST PRODUCT LINE ARE SUPPORTED. A QUARTZ ACCURATE SIGNAL GENERATION AND THE MODERN RECEIVER TECHNOLOGY COMPLETELY REPLACE CALIBRATION MEASURES. DOWNTIMES AND PRODUCTION LOSSES ARE A THING OF THE PAST. THE M-PULSE2 IS ALSO AVAILABLE WITH ETHERNET. IN THE PROCESS, ALL EVENTS CAN BE LOGGED AND EVALUATED IN ACCORDANCE WITH HACCP, ISO OR IFS. THE COMPREHENSIVE USER MANAGEMENT AND DOCUMENTATION DATA MAKE THE M-PULSE2 THE FIRST CHOICE IN QUALITY CONTROL

### FEATURES

- *FOUR-QUADRANT TECHNOLOGY*
- *MULTI-FREQUENCY TECHNOLOGY*
- *TOUCH SCREEN / GRAPHICAL DISPLAY*
- *HIGH-PRECISION PRODUCT EFFECT OFFSETTING*
- *UNLIMITED PRODUCT MEMORY SPACES*
- *NETWORKING / ETHERNET / USB*
- *COMPREHENSIVE SUPPORT FOR PERIPHERALS*
- *REMOTE DIAGNOSTICS*
- *DISPLAY TRANSMITTED BY RS485*



A NUMBER OF INNOVATIONS AND ADDITIONS TO THE MULTIPLE-FREQUENCY TECHNOLOGY, HAVE BEEN IMPLEMENTED IN THE ELECTRONICS OF THE M-PULSE2. SPECIAL EMPHASIS WAS PLACED ON INTERFERENCE RESISTANCE (EMC) AND STABILITY. QUARTZ-BASED SIGNAL GENERATORS ELIMINATE THE PHENOMENA OF DRIFT AND AGEING. THE MULTIPROCESSOR SYSTEM CAN EVEN BE UPDATED AT ALL TIMES USING REMOTE MAINTENANCE.





**MACHINE BUILDERS, INC.**

## M-PULSE2 / TECHNICAL DATA

<b>MECHANICAL DATA</b>	
<b>DIMENSIONS</b>	B X H X T: 250 X 330 X 160 MM
<b>WEIGHT</b>	CA. 4.600 G
<b>HANDLING</b>	
<b>DISPLAY &amp; KEYBOARD</b>	320 X 240 TFT (65.536 COLORS) INCL. TOUCH + MULTIFUNCTION- AND ARROW KEYS
<b>CONDITIONS OF USE</b>	
<b>STORAGE TEMPERATURE</b>	-10°C... 60°C
<b>OPERATING TEMPERATURE</b>	0°C... 50°C
<b>PROTECTION CLASS</b>	IP-65
<b>SUPPLY VOLTAGE</b>	85 - 264 VAC; 50/60 HZ ALTERNATIVE: 24 VDC
<b>POWER CONSUMPTION</b>	TYP. 15 W; MAX. 40 W
<b>ELECTRICAL CONNECTION</b>	3 M CABLE; L1,N,PE; 1,5 MM <sup>2</sup>
<b>SENSITIVITY</b>	SEE SENSOR OR DEVICE
<b>INTERFACES</b>	
<b>SENSOR - TRANSMITTER</b>	50 OHM; OVERLOAD- & SHORT-CIRCUIT PROOF (50 .. 1.000 KHZ)
<b>SENSOR - RECEIVER</b>	HDC-IQ - DIGITAL RECEIVER (31 BIT) WITH SENSOR-READJUSTMENT AND MONITORING MULTI-FREQUENCY TECHNOLOGY (MAX. 4 FREQUENCY)
<b>DIGITAL INPUTS</b>	8 INPUTS. OPTICAL ISOLATED; VIL = -5 .. 1,5V; VIH = 6 .. 50V MULTIFUNCTION-KEY (FUNCTION SELECTABLE) MOTOR ERROR EJECTION AND LEVEL GUARD PRODUCT TRIGGER EXTERNAL START; EXTERNAL ENABLE; EXTERNAL ERROR
<b>ANALOG INPUTS</b>	1 INPUT. 0.. 10 V; RESOLUTION 10 BIT SPEED
<b>DIGITAL OUTPUTS</b>	7 OUTPUTS. PNP-OPEN COLLECTOR; MAX. 1.000 MA; OVERLOAD- & SHORT CIRCUIT PROOF 2X DEVICE STATE, 2X EJECTION, 2X SIGNAL, BELT RUN
<b>ANALOG OUTPUTS</b>	1 OUTPUT.; 0 ..10 V; RESOLUTION 12 BIT; MAX. 10 MA OVER- & SHORT CIRCUIT PROOF DESIRED SPEED
<b>RELAY</b>	2X CHANGE-OVER CONTACT; MAX. 230 V / 2 A
<b>NETWORK</b>	ETHERNET; RJ45; 10/100 MBIT
<b>SERIAL INTERFACE</b>	RS232 (ALL TYPES AND FORMATS)

*Foremost Machine Builders, Inc.*

23 Spielman Road | Fairfield, NJ 07004 | 973-227-0700 | [www.foremostmachine.com](http://www.foremostmachine.com)

Email us at [sales@foremostmachine.com](mailto:sales@foremostmachine.com)