DME

YOUR PARTNER
FOR PRODUCTIVITY
AND SUSTAINABILITY

DME

eSTORE

ADVANCED, COMPACT TEMPERATURE CONTROL FOR MEDIUM SIZED MOLDS

The M1 platform combines popular features with advanced APS Technology for precision control of up to 48 zones. Powerful performance in a compact unit. Optimize the performance of any hot runner system and unlock your operations full potential with SmartSeries.

KEY FEATURES

LARGE, INTUITIVE 7" TOUCH SCREEN COLOR HMI
- Easily monitor and control multiple zones at once
- Simple to set-up and operate
- Data displayed in real time

ADVANCED FEATURES & SETTINGS
- Excellent control and precision
- Achieve greater process stability
- Mold parts with higher quality and reduce scrap
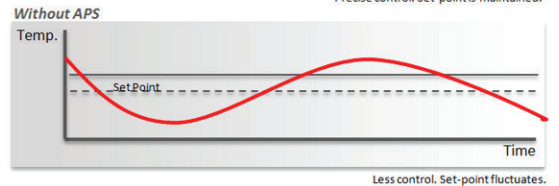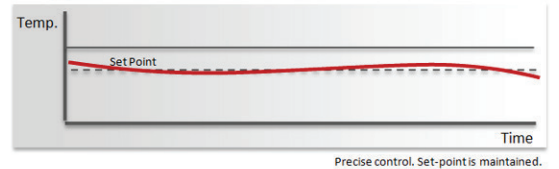
COMPACT CABINET DIMENSIONS
- Preserves valuable space, can be placet anywhere
- Up to 32% smaller dimensions than competition

HIGH CAPACITY MODULAR CONTROL CARD
- Reduces number of cards required by up to 60%
- On-board heater and thermocouple fuses
- Eliminates excess wiring and improves accessibility
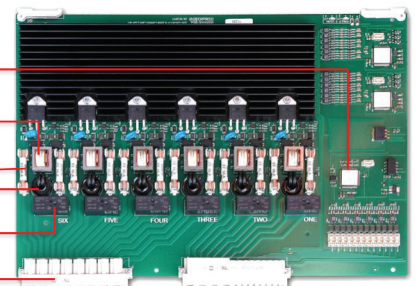- Simple to access and maintain

IMM COMMUNICATION
- Centralized alarm interlock
- Enhanced process control
- Prevents damage to equipment

SMART SERIES® M1+

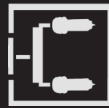| REF	Slots	# of Zones	Cabinet size	Dimensions WxDxH in cm	Main
M1P1212NC	2	12	XS	35 x 51 x 22	40A
M1P2424NC	4	24	S	35 x 51 x 28	63A
M1P3648NC	6	36	M	35 x 51 x 50	63A
M1P4848NC	8	48			

New faster CPU
Current measurement
Dual line fusing
Ground fault detection
Dual line switching
Reliable bus connector

6-Zone, 15A/Zone Control Card

CAPABILITIES

Control Features
APS (Adaptive Process System)
Phase Angle, Burst Firing
Low Mass High Watt Nozzle
Control
Infield Calibration Mode
Thermocouple Slave (Auto/ Manual)
Auto Standby/Alarm Output
T/C Auto/Man Kick-Off
Wet Heater Bakeout
T/C Filtering
Delta/Wye Convertable Option
Circuit Breaker Sized to Load
Interface Autopilot Control
Set Point Limit
Set Power Limit
Standby Timer
Sequential Melt-Start
Even Heat (Controlled Heating)
Even Cool (Controlled Cooling)

Operational Features
Auto/Manual Control
Zone "on", "off" and "locked off"
Menu "Auto Save"
Boost (Manual/Auto)
Tool Store (100 Limit)
USB Port
Zone Naming
Programmable Display Groups
Purge Wizard (Color Change)
Sequence Start
Sequence Shutdown
Sequenced Power Up (Manual)
Tool Data Export/Archive
Multi-Level Password (2)
Time and Date Change
Network Printing (Ethernet IP)
Touch Screen Calibration
On-Line Help

Protection Features
On-Board Load Fuses
On-Board T/C Fuses
Soft Start
Continuous Ground Fault
Detection
Current Measurement
Overload Protection
Short Circuit Protection
Automatic Tool Diagnostics
Plastic Leak Detection (Manual)
LED Fault Indicators (2)
I/O Card (Optional)

Monitoring/Reporting
Instant Data Reporting
Data Report Archive
Print Screen in jpg, png, pdf
Format
Save to USB Drive
2-D Historical Graph

Alarms
Audible Alarm (Optional)
Alarm Beacon (Optional)
Zone Alarm Configure
(+) High Temperature
(-) Low Temperature
T/C Open (Remembered % Output)
T/C Reversed
Open Fuse
Open Heater
Shorted Heater/Wet
Ground Fault Detection
Plastic Leak Detection
Programmable Action

SPECIFICATIONS

User Interface	Full Color LCD Touch Screen
Display Sizes	7" (178 mm)
Control Algorithm	APS (Adaptive Process System)
Power Control	Phase Angle and Burst Firing Modes (Time Proportional, Zero-Crossing)
Display Resolution	0.1 (^{0}C or ^{0}F)
Power Response Time	8.3 ms at 60 Hz
Temperature Scale	^{0}C or ^{0}F (Software Selectable)
Thermocouple	J or K-Type (Software Selectable)
Operating Range	0 - 472^{0}C (32 - 882^{0}F)
Output Voltage (Max)	264 VAC
Supply Voltage	200/240V 3P Delta or 380/415V 3P Star with Neutral (480V, 3P with optional transformer)
Frequency	50 - 60 Hz Automatic Switching
Ambient Temperature Range	5 - 45^{0}C (41 - 113^{0}F)
Humidity Range	Up to 95% non-condensing

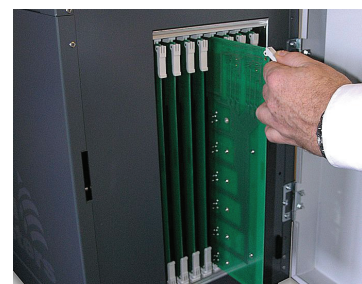|	
Ground Fault Detection	40mA per Zone
Alarm Output	Closing Contact Relay 5A, 230V (Max)
T/C Connector	HAN 24e
Power Connector	HAN 24e
Input Protection	63mA Nano Fuses on Both T/C Legs
Overload Protection	Semi-conductor fuses on both heater legs
Heater Fuses	15A @ 220V Fast Blow Type
Control Modes	Closed Loop (Auto), Open Loop (Manual), Standby, Boost, Slave
Ports	USB and Ethernet
LED Indicators	Scan, Fuse, Thermocouple, Failure, Ground Fault, Power%
Communications	SPI, Modbus
Languages	English, French, German, Spanish, Chinese, Japanese, Czech, Italian, Hungarian

INCLUDES
- Supply Cord
- Quick start guide

UPON REQUEST
- 4.8m (15') Cable Set

OPTIONS
- Alarm beacon
- Portable stand
- I/O Card (Included as standard in EU)

Easy access to control cards