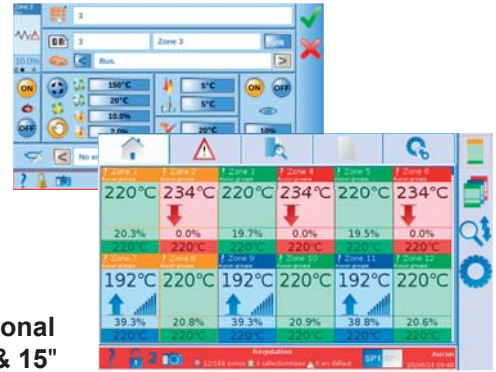




# Multi-Zone Controller for hot runner systems

## M Series

*generation V2*



Optional  
10" & 15"  
touchscreen  
monitors

*PTI function  
(Detects pinched thermocouples)*



XL Version

L (T) Version

L (LCD) Version

S (T) Version

XS (LCD) Version

**The M series of controllers was specifically designed for applications with a higher number of control zones within the mold**

**With a combination of 15A, 20A and 30A power control cards (custom cabinets), the M series can be used for any number of applications, especially in the automotive, packaging, cosmetic, and medical industries**





# PLASTICS TECHNOLOGY UNDER CONTROL



## GENERAL SPECIFICATIONS

- From 8 to 144 zones and more
- 15A compact power module, 20A or 30A per zone
- Standard LCD interface
- Optional 7" integrated color touchscreen
- Communication E17 - SPI - CANBUS - USB
- Small footprint
- Internal modular concept

## STANDARD FUNCTIONS

- Permanent self tuning control (\*)
- 2 adjustable setpoint values
- Display of % power and load current per zone (Amps)
- High and Low Alarm (adjustable per zone, output on relay)
- Broken thermocouple (Display THC)
- Inverted thermocouple (Display THI)
- Automatic and Manual modes
- Zone Designation (8 digits max.) : MANIF1, SPRUE, TIP26
- Zoom in on 1 or more zones
- Keyboard locks with password
- 16-mold files (Unlimited with touchscreen PC)
- Electrical Data from mold saved for analysis
- Standard multilingual interface (11 available languages)

(\*) The M Series uses a new version of our «Permanent Self Tuning Control» software, conceived and developed by S.I.S.E. It conducts phase control during the soft start, and pulse triggered & zero crossing (PWM) during heating, guaranteeing the lifespan of the heating elements and respecting CEM standards.

## ADVANCED FUNCTIONS

- Programmable display of zone data
- Boost function
  - Positive
  - Negative
  - Period of Time
- Percentage of Power Surveillance (%)
- Choice of 4 Softstart Programs (time duration, °C/minute, shifted, synchronized)
- Real-Time Mold Surveillance for variations in electrical data
- Automatically switches to Manual Mode using last recorded Power Applied
- Zone slaving

*Flashing audible alarm (option)*



*Cable Tray (option)*



*Facilitated Maintenance!*



*Fast Access!*





### DIAGNOSTICS FOR MOLD UNDER CONTROL !

#### ● WITH MOLDSCAN, EASIER MOLD MAINTENANCE



**Moldscan** displays critical Mold data :

- Electrical power in Watts for each mold heating element
- Resistance value in Ohms for each mold heating element
- Thermocouple presence, zone by zone

**Moldscan** saves all of this information in a reference file.

At production start up, **Moldscan** analyzes measured and saved values on a zone by zone basis.

If there are differences found, **Moldscan** points out the origin of the problem :

- Thermocouple State
- Installed electric power calculation and comparison
- Triac functionality

#### ● PTI FUNCTION



- Detects reversed thermocouples
- Detects pinched thermocouples
- Detects misconfigured slaved thermocouple

#### ● REAL-TIME DETECTION OF MATERIAL LEAKAGES



Additionally, **Moldscan** can continuously analyze variations in power demanded by each zone.

**Moldscan** can activate an alarm in real-time when a problem is detected on a zone.

### TECHNOLOGY

We use a single microprocessor to control up to 24 zones, which allow for an extremely compact design :

- Optocoupled thermocouple inputs in groups of 8 zones
- 15A, 20A and 30A modular power cards available
- Easier to operate with two new optional 10" (L) or 15" (L and XL) touchscreen interfaces
- Easy maintenance







S.I.S.E. STANDARD INTERFACE LCD



BLOC-1 OK 119°C 9.6%	ZONE2 OK 22°C 0.0%	ZONE3 !▼ 22°C 63.1%	ZONE4 OK 119°C 8.3%
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8-zone display

BLOC-1 OK 113°C 13.5%	ZONE2 OK 22°C 0.0%	ZONE3 !▼ 21°C 63.2%	ZONE4 !▼ 113°C 12.5%	ZONE5 !▼ 112°C 12.8%	ZONE6 !▼ 113°C 12.8%
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12-zone display

BLOC-1 OFF 23°C 6.8%	ZONE2 !▼ 113°C 13.4%	ZONE3 OFF 0.0%	ZONE4 OFF 0.0%	ZONE5 OFF 0.0%	ZONE6 OFF 0.0%	ZONE7 OFF 0.0%	ZONE8 OFF 0.0%	ZONE9 OFF 0.0%	ZONE10 OFF 0.0%	ZONE11 OFF 0.0%	ZONE12 OFF 0.0%
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16-zone display

Temperature Page



Single Zone Display

ZONE1	ZONE2	ZONE3	ZONE4
ZONE5	ZONE6	ZONE7	ZONE8
ZONE9	ZONE10	ZONE11	ZONE12
ZONE13	ZONE14	ZONE15	ZONE16

Moldscan Analysis Page

BLOC-1 OK <0.43 A <100 U	ZONE2 OK 0.00 A 0 U	ZONE3 !▼ 0.00 A 0 W	ZONE4 OK <0.43 A <100 W	ZONE5 OK <0.43 A <100 W	ZONE6 OK <0.43 A <100 W
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Amperage Readouts

NEW S.I.S.E. INTERFACE TOUCHSCREEN (OPTION)

220°C	234°C	220°C	234°C	220°C	234°C
20.3%	0.0%	19.7%	0.0%	19.5%	0.0%
192°C	220°C	192°C	220°C	192°C	220°C
39.3%	20.8%	39.3%	20.9%	38.8%	20.6%

Temperature page



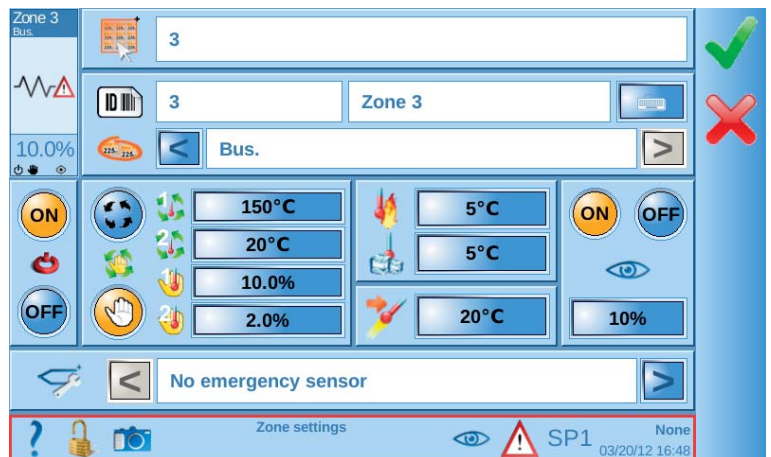
Settings page



Softstart page

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8
0°CMin	0°CMin	0°CMin	0°CMin	0°CMin	0°CMin	0°CMin	0°CMin
0 W	0 W	0 W	0 W	0 W	0 W	0 W	0 W
0.0 A	0.0 A	0.0 A	0.0 A	0.0 A	0.0 A	0.0 A	0.0 A

Analysis Page



Zone Settings Page

