

NEW Gen II vs. Gen I Heater Controllers External Control Capabilities

	Gen II Heater Controllers (Multicon™, Monocon™)			Gen I Heater Controllers (MultiSleeve™, MonoSleeve™)	
Condition / Action / Situation	Input Relay ^{1,2}	Output Relay ^{1,3}	USB to PC ^{3,5} (ModBus RS-485)	Contact Closure	USB to PC
Interfaces with instrumentation / hardware	/	/	NA	/	×
e.g LC pump runs dry / shut down heater ⁶	/	NA	NA	×	×
e.g turn off LC pump ⁶	NA	/	/	×	×
Sends commands to adjust most parameters	NA	NA	/	NA	×
Uses GUI Software 4,7	NA	NA	X ⁴	NA	/
Condition 1: Set-point Reached	NA	/	/	×	×
Condition 2: Above Set-point	NA	/	/	×	×
Condition 3: Below Set-point	NA	/	/	×	×
Condition 4: Heater Fails	NA	/	/	×	×
Condition 5: Heater Enabled	/	/	/	/	×
Condition 6: Countdown Timer Expired	NA	✓	/	×	×

- (1) Programmable independently for each heater device
- (2) Completed circuit: Heat to setpoint; Disconnected: Off/Ambient
- (3) Six conditions and the contact can be momentary or latching
- (4) Gen II allows for scripted commands. Previous generation only had GUI software.
- (5) ModBus RS-485 allow for daisy chaining up to 31 controllers and serial commands addressable to each node.
- (6) Requires pump to have output contact closure and be programmable for situation.
- (7) Graphical User Interface (GUI) not required in Gen II
- NA Not applicable.

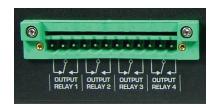
Gen II Heater Controller Connections



Input Relays

Completed circuit = Heat to setpoint Open = Off / Ambient

Can be enabled/disabled per channel/ device and set-point programmed on touchscreen or via USB commands.



Output Relays

Conditional set on touchscreen or via script/commands

Relays are programmable to be either momentary or latching (sustained).



MODBUS RS-485Daisy chain controllers or other RS-485 hardware



USB Used to initiate / first connection of ModBus RS-485 chain