



Technical Data Controllers

- **Input Power:**
220 to 240 volt 50/60 Hz single phase or 28 volts AC 50/60 Hz.
- **Power Consumption:**
180 mA at 240 volt 50 Hz (add 25 mA per solenoid).
150 mA at 220 Volt 60 Hz (add 25 mA per solenoid).
75 mA at 28 Volt AC 50/60 Hz (add 25 mA per solenoid).
(Add solenoid inrush current/s for wire sizing)
- **Transformer:**
27.5 Volt 3 amp output, overload protection and secondary thermal 3 amp fuse protection.
- **Lightning Protection:**
Pedestal Controllers: 20,000 Amp/20 µsec Primary Gas Arrestor; Secondary 6,500 amp/20 µsec, and tertiary 6,500 amp/20 µsec 10 amp relay protection.
Wall Mount Controllers:
Primary 6,500 amp/20µsec, secondary 6,500 amp/20µsec 10 amp relay protection.
- **Communication Cable:**
0.64 mm² poly/poly sheathed two pair communication cable (red/black/blue/white). Always use screened sensor cable. Maximum cable distance is 20 km.
- **Radio Equipment:**
Recommended Maxon Type DM-0500 or equivalent transceivers with power supply, cabling and antennae. Seek local radio equipment suppliers for specific site requirements.
- **Flow Sensors:**
Signet type 8511 4-20 mA flow transmitters (or equiv). No power supplies required with transmitters.
- **Pressure Sensors:**
Genspec GS 4000 or Sedeme TB103 4-20 mA transducers (or equivalent). No power supplies required with transducers.
- **Pulse Sensors:**
Dry contact magnetic pulse sensors from 1 to 99 pulses per flow unit.
- **Switch Contacts:**
Dry N.O. switch contacts.

Technical Data Field Satellite

- **Cabinets:**
Stainless steel wall mount or pedestal units.
 - **Capacity:**
32 station
 - **Programs:**
Grouping or single station programs.
 - **Grouping Programs:**
Ten independent grouping programs of up to 10 standard Irritrol valves per group, (maximum of 2.5 amps) and 40 groups per program.
 - **Single Station Programs:**
For fixed control uses, eg. lighting control, fountains, BBQ areas, etc.
 - **Percentage Override:**
0 to 250% global adjustment per program for fine tuning of programs.
 - **Delays:**
Inter-group and cycle delay times.
 - **Cyclic Ability:**
Allows up to 9 cycle repeats per program.
 - **Schedule:**
14 day schedule per program.
 - **Manual Operation:**
With start, stop and hold function.
 - **Manual Spot Watering:**
Up to ten valves with a settable run time.
 - **Test Valve:**
Manual sequential valve operation.
 - **Self Test Diagnostics:**
Internal communications check and set-up function for field testing.
 - **Password Setting:**
For protection against unauthorised use.
- Standard Reports:**
- Current:** Solenoid current checking to database for field maintenance.
- Flow:** Flow testing program to database for flow reporting (flow sensors must be installed).

Total Times: Totalised run time reporting database per station.
Instantaneous: Flow and pressure status (optional input boards must be installed).

- **Display:**
Easy-to-read four row by 40 character self-prompting display.
- **Help Facility:**
In-built help facility.
- **Permanent Memory:**
Programs are stored permanently, so are never lost.
- **Back-Up Battery:**
Keeps time and day in the event of a power failure.
- **Auto-Reset Transformer:**
Temperature overload on transformer to protect system on overload.
- **Standard Multi-Stage Lightning Protection:**
Offering the latest protection available.



ORDERING INFORMATION

Code	Description
Micro-Master® 5000 - Wall Mount Controllers, Two Wire Communication Systems	
I013549	5000 Wall Mount Controller; 32 Station, Two Wire Communication
I013568	MM5000 Ag Master software (Windows 98)
CMM500080	Modem protection unit
I013563	2 wire termination boards (required to be fitted to the two furthest satellites)
CMM5000301	5000 Series Windows upgrade chip - one per controller
Micro-Master® 5000 - Wall Mount Controllers, Radio Communication System	
I013560	5000 Wall Mount Controller; 32 Station, Radio Communication
I013564	5000 Series Radio to Two Wire Master Communication Board
I013565	5000 Series Slave Two Wire Communication Board - suit I013564
I013568	MM5000 Ag Master software (Windows 98)
CMM500085	MM5000 Radio Master software (Windows 98)
CMM500090	Radio Communications OUtput Board and Ribbon Cable
CMM500060	Radio Protection Board
CMM5000301	5000 Series Windows upgrade chip - one per controller
Micro-Master® 5000 - Pedestal Mount Controllers, Two Wire Communication Satellite Systems	
I013547	5000 Series Hardware 32 Station 240 VAC System (to fit pedestal, Code I013548)
I013548	5000 Series Pedestal (to mount hardware, Code I013547)
I013568	MM5000 Ag Master software (Windows 98)
CMM500080	Modem protection unit
I013563	2 wire termination boards (required to be fitted to the two furthest satellites)
CMM5000301	5000 Series Windows upgrade chip - one per controller
Micro-Master® 5000 - Controllers Accessories	
I013553	5000 Series Screened Sensor Cable - 500 m
I013554	5000 Series Screened Sensor Cable - 1000m
I013542	5000 Series On/Off Input Board (17 Inputs, 1 x Pulse)
I013543	5000 Series Input Board (4-20 mA) (2 x Flow, 2 x Pressure, 2 x Pulse)
I013563	5000 Series Two Wire Termination Board (required to be fitted to the end of Communication Cable runs)
CMM500022	2 Wire Protection Board
I013556	5000 Series STAF Radio Card (suit 2 wire system only)

Optional Accessories Controllers

Input Boards:

(Installed into satellites)

4-20mA Flow and Pressure: Up to two analog flow and two analog pressure sensors can be installed per board. There is also capability for up to two pulse flow sensors. This board should be used if instantaneous flow and pressure readings are required.

On/Off Input Board:

Up to seven programmable N.O. switches which can be programmed to start, stop, hold and auto-skip programs. There is also the capability of attaching one pulse flow meter to be used for alarming and override functions.

Minimum Computer System Requirements

- Speed: 500 mhz or greater
- Memory: 128 MB or greater
- Hard Disc: 10 GB or greater
- Video Card: AGP 8-16 MB or greater
- Monitor: 17 inch or greater
- Modem: Internal 56, no voice, configured to serial port 3
- Additional Serial Ports: 1 and 2
- Parallel Port: 1
- Sound: Yes
- Speakers: Yes
- CD Rom: Yes
- Mouse: PS2 Bus Mouse
- Keyboard

Additional Software Required

- Windows 98, 2000, ME or XP.
- PC Anywhere- to allow remote service of Micro-Master Software