

# Maestro Universal - Data Sheet

### Basic Platform:

Windows CE based microprocessor  
 10" 640x480 color LCD display  
 Inputs: 10 digital (24V<sub>DC</sub>), 13 analog (4-20mA ), 10 RTD inputs (100 ohm platinum)  
 Outputs: 11 digital (24V<sub>DC</sub>), 4 analog (4-20mA)  
 Motor Current: Built-in current transmitter  
 Current Rating: 0-5A<sub>AC</sub>  
 Voltage Rating: 0-30V<sub>AC</sub> max  
 Enclosure: NEMA 12 (outdoor watertight & dustproof)  
 Input Voltage: 120 V<sub>AC</sub>  
 Input Voltage Range: 90-260 V<sub>AC</sub>  
 Rated Frequency Range 50-60Hz  
 Internal Power Supply: 24V<sub>DC</sub>  
 Power Consumption: 150W  
 Temperature Operating Range: 32°F – 122°F (0°C – 50°C)  
 Temperature Storage Limits: -10°F - 140°F (-23°C - 60°C)  
 Humidity Operating Range: 92.5% Relative Humidity  
 Safety Approvals: UL, CSA and CE

### Software Options:

Auto start/stop  
 Constant Pressure  
 Operation scheduler  
 Auxiliary loop controls  
 Performance log  
 Sequencer

### Hardware Options:

Additional IO module  
 Control panel cooler  
 NEMA 4, NEMA 4X, IP66 enclosure – Class 1, groups C&D, Division 2 (limited hazardous)  
 Purge Z valve  
 Audible/visual alarm annunciation  
 On/off dry contacts

### Communications:

Remote monitoring with built-in web server  
 MODBUS protocol interface (RS-485 serial port)  
 PROFIBUS protocol interface  
 USB interface  
 Ethernet interface  
 CANbus inter-module communication

### Control Modes:

5-loop constant pressure with selectable auto load/unload enable  
 5-loop auto dual control  
 Configurable monitoring and control points  
 Constant mass flow  
 4-loop constant pressure control (selectable)

### Unique Features:

Set-up wizard for configuration  
 Additional PC based configuration software  
 Selectable home page and built-in help documentation  
 Alarm and trip e-mail alerts  
 Data logging performance history logs

### Operator Interface:

10" Color display with two color usage  
 Multiple languages for global destinations  
 Numeric and operational direction keys  
 Local/remote selection keys  
 Auto/unload selection keys  
 Acknowledge and reset buttons

### Extended Operations and Functional Options:

Condensate valve control  
 Oil heater interlock and control  
 Motor bearing / stator temp monitoring  
 Additional vibration and RTD channels  
 Differential oil pressure across oil filter  
 Oil level switch  
 Panel purge switch  
 Common alarm/trip dry contacts  
 Temperature compensated flow  
 Surge detection and count  
 Auto surge test  
 Two process control functionality  
 Turbine driver interface

### Control Panel Monitoring Functions:

Item	Readout	Warning		Faulty Sensor	
		Alarm	Trip	Alarm	Trip
Inlet Air Temp	X	X	X	X	
System Air Press	X			X	
Oil System Press	X	X	X	X	
Oil Temp	X	X	X	X	
Stage Vibration Level	X	X	X		X
Motor Current	X				X
Power Supply Voltages	X	X			
Total Run Time	X				
Calendar/Clock	X				

