

McQuay Rooftop and Self-Contained Units Offer Advanced Controls with Open Choices™ Integration

McQuay applied rooftops systems, self-contained units and Maverick II™ commercial rooftop units are equipped with a complete MicroTech® III controls system. The unit controllers are factory mounted and configured for stand-alone operation or integration with a building automation system (BAS) through an optional communication module with our Open Choices feature.

Open Choices Benefits for Easy Integration

- Easy, low cost integration into most building automation systems without costly gateway panels.
- Flexibility to select either BACnet® or LONWORKS® communication. Units are LONMARK® 3.4 certified with the appropriate communications module for LONWORKS networks.
- Comprehensive unit control and status information is available at the BAS regardless of communication protocol. See typical points list on the back page.
- Long-term choices for equipment adds or replacements, and for service support.
- Flexible alarm notification and prioritization with Intrinsic Alarm Management (BACnet).
- Simplified BAS integration with the ability to set network parameters at the unit controller, reducing installation time and costs.
- Easy monitoring and troubleshooting of communication status from the unit controller to the BAS.



Advanced Control Strategies Optimize Comfort and Reduce Energy Costs

Building Static Pressure Control for either whole building or lab pressurization (positive or negative) applications

Minimum Ventilation Air Volume Control to consistently maintain the outdoor air requirements of ASHRAE Standard 62 to optimize indoor air quality.

Timed Tenant Override for the extended, off-hours comfort flexibility required in today's buildings.

Variable Air Volume Or Constant Volume Control capabilities that can be customized to meet the requirements of demanding applications.

Night Setback and Setup Control to take advantage of outside air for free cooling to reduce energy costs.

Outdoor Air Purge Purge Control to flush the space with fresh outdoor air prior to occupancy (airside economizers required on self-contained units).



McQuay Rooftop



McQuay Self-Contained

Open standard protocol network such as BACnet or LonTalk



Building automation system of your choice!

McQuay[®]
Air Conditioning



Comprehensive Data Available — Regardless of Protocol Choice

The McQuay MicroTech III unit controller provides applied rooftop and self-contained unit status information and notifies your BAS of alarm conditions, regardless of the available communication protocol being used:

- LonTalk DAC (FTT-10A)

Designed in accordance with LONMARK Discharge Air Controller (DAC) Functional Profile

- LonTalk SCC (FTT-10A)

Designed in accordance with LONMARK Supply Comfort Controller (SCC) Functional Profile

- BACnet MS/TP
- BACnet/IP

Typical Data Points ■ BACnet only ■ LONWORKS only

Outputs (read/write)

Emergency Override
 Application Mode
 Occupancy Mode
 Duct Static Pressure Setpoint
 Remote Supply Fan Cap Control Flag
 Supply Fan Capacity Input
 Building Static Pressure Setpoint
 Remote Return/Exhaust Fan Cap Control Flag
 Return Fan Capacity Input
 Exhaust Fan Capacity Input
 Occupied Cooling Setpoint
 Unoccupied Cooling Setpoint
 Discharge Air Cooling Setpoint
 Minimum Discharge Air Cooling Setpoint
 Occupied Heating Setpoint
 Unoccupied Heating Setpoint
 Discharge Air Heating Setpoint
 Maximum Discharge Air Heating Setpoint
 Relative Humidity Setpoint
 Dew Point Setpoint
 Receive Heartbeat ■
 Send Heartbeat ■
 Outdoor Air Temperature Input
 Minimum Outdoor Airflow Setpoint
 Space Temperature Input
 Occupancy Scheduler Input
 Primary Cool Enable
 Primary Heat Enable
 Economizer Enable
 Water flow Switch Input
 Space IAQ Input
 Relative Humidity Input
 Temperature Setpoint Input ■
 Outdoor Air Damper Min Position Input
 Clear Alarms
 Minimum Send Time ■
 Notification Class – Faults ■
 Notification Class – Problems ■
 Notification Class – Warnings ■
 Unit Support ■

Inputs (read only)

Unit State
 McQuay AHU Unit Status
 Cooling Status
 Heating Status
 Economizer Status
 Cooling Capacity
 Heating Capacity
 Supply Fan Capacity
 Return/Exhaust Fan Capacity
 Economizer Capacity
 Occupancy
 Control Temperature ■
 Discharge Air Temperature
 Return Air Temperature
 Space Temperature
 Outdoor Air Temperature
 Entering Fan / Leaving Coil Temp
 Entering Water Temperature
 Mixed Air Temperature
 Return/Exhaust Fan Status
 VAV Box Output
 Duct Static Pressure
 Building Static Pressure
 Conductivity
 Space CO2
 Outdoor Airflow
 Outdoor Airflow Setpoint ■
 Relative Humidity
 Dew Point Temperature
 Reheat Capacity
 Effective Enable Setpoint ■
 Local Space Temperature
 Local OA Temperature
 Energy Recovery Discharge Air Temperature ■
 Energy Recovery Exhaust Temperature ■
 Energy Recovery Wheel On/Off ■
 Energy Recovery Wheel Speed ■

Alarms

Dirty Filter
 Airflow Sw
 Conductivity
 Waterflow Sw
 Water Regulating Valve
 Low Pressure – Circuit 6
 Low Pressure – Circuit 5
 Low Pressure – Circuit 4
 Low Pressure – Circuit 3
 Low Pressure – Circuit 2
 Low Pressure – Circuit 1
 High Pressure – Circuit 6
 High Pressure – Circuit 5
 High Pressure – Circuit 4
 High Pressure – Circuit 3
 High Pressure – Circuit 2
 High Pressure – Circuit 1
 Sump Pump Fail
 EFT_LCT Problem
 Return Air Sensor Problem
 Space Sensor Problem
 OAT Sensor Problem
 EWT Problem
 Heat Fail Problem ■

*A global leader in
system solutions for
air conditioning, heating,
ventilating and refrigeration.*



The following are tradenames or registered trademarks of their respective companies: BACnet from ASHRAE; MicroTech III and Open Choices from McQuay. LonTalk, LONWORKS, LONMARK and the LONMARK logo are managed, granted and used by LONMARK International under a license granted by Echelon Corporation.