

Model 5000 Analyzer Controller

The AMETEK Model 5000 Moisture Controller is designed for process moisture applications. It is the ideal upgrade for existing Model 560, 560B, or 5600 controllers because it combines all of the benefits users request in a microprocessor controller: reliability, serviceability, ease of use, and communications.

EASY TO USE

The Model 5000 has an informative full text display and intuitive user interface. The 4-line display has 20 characters per line. The first three lines are fully user configurable. Line 4 is reserved for automatically detected error and diagnostic information. The keypad provides convenient local control of all operating parameters.

RELIABLE

High quality components have been used throughout to ensure reliable performance, including an internationally approved universal input power supply. The Model 5000 is RFI/ESD and transient compliant to IEC 801-2, 3, and 4. Modular construction provides convenient, no-tools access for service needs.

SELF DIAGNOSTICS

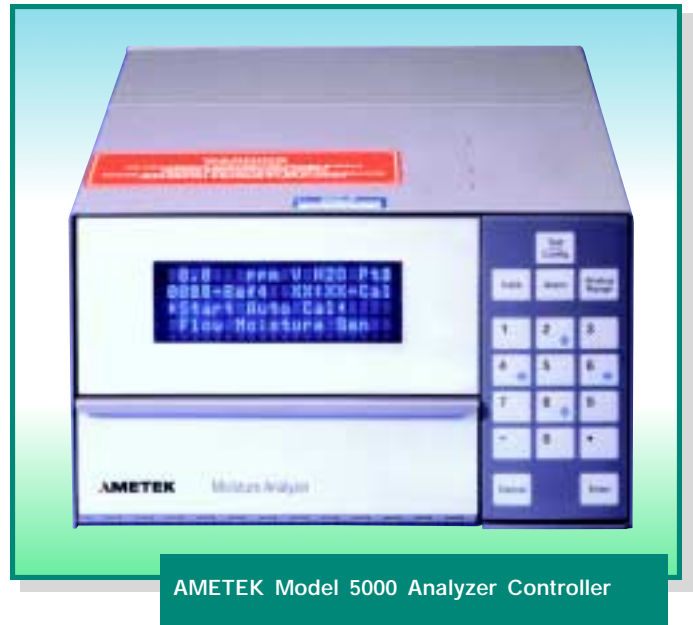
A system test, accessible from the SETUP menu, checks the A/D, RAM, EEPROM and keypad for proper operation. In addition, a COP, or watchdog, alarm activates when normal CPU logic flow is disrupted due to hardware or software problems or extreme electronic interference.

AUTOCALIBRATION

The Model 5000 provides timed autocalibration control to the field unit to verify proper analytical performance. Moisture values may be suspended or output during calibration, and a contact output alerts you or your data acquisition system that calibration checks are in progress. A calibration alarm is generated if the calibration results are outside of the performance window you set up.

OUTPUTS

Two independent isolated 4 to 20 mA outputs are provided. You can scale each output to cover any moisture range of interest. One analog output is autoranging. Analog outputs may be set for track or hold during autocalibration. Digital



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communication is bidirectional RS485, allowing remote configuration of all settings and the ability to link up to 32 controllers to a single host.

ALARMS

Four alarm contacts are supplied: a system alarm which indicates a system failure; a hi-lo concentration alarm; hi-lo range or calibration alarm; and a COP or watchdog alarm.

SECURITY

Three separate security levels prevent unauthorized or inadvertent changes to alarm levels, range, or operating conditions.

ENCLOSURES

Choice of wall mount, rack mount, panel mount, or NEMA 4X enclosure for Class I, Division 2, Groups A, B, C, & D areas. An explosion-proof Class I, Division 1 / CENELEC Zone 1 enclosure is also available. Installation, operation, and maintenance are simple, quick, and convenient.

FEATURES AND PERFORMANCE SPECIFICATIONS

STANDARD INPUTS AND OUTPUTS

- **Four line by 20 character vacuum fluorescent display**
Lines 1, 2, and 3 fully user configurable
Line 4 reserved for error and diagnostic information
- **Eighteen button keypad** and user-friendly menu system for local operation
- **Two 4 to 20 mA, 600 ohm isolated outputs** (one autoranging)
- **RS485 bidirectional serial communication**
- **4 alarm contacts:** COP (watchdog), system alarm, concentration alert, and range or calibration alert
- **Capable of controlling up to four sample streams**
- **Inputs provided for temperature and pressure for dew point calculation**

PHYSICAL AND ELECTRICAL

Power: 95 to 230 VAC $\pm 10\%$, 47 to 64 Hz, 75 VA

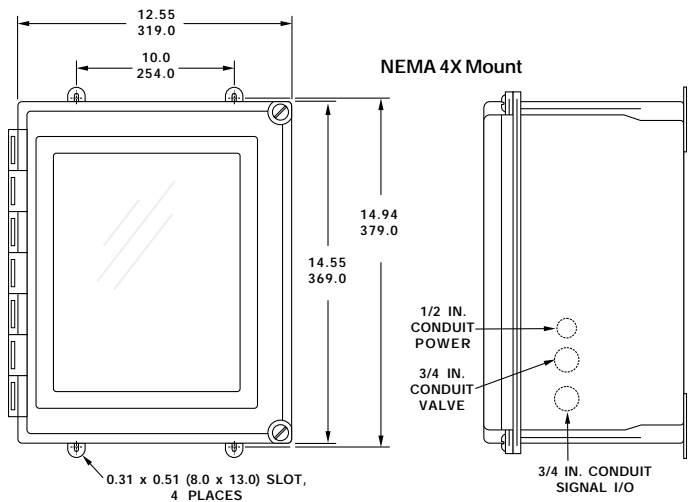
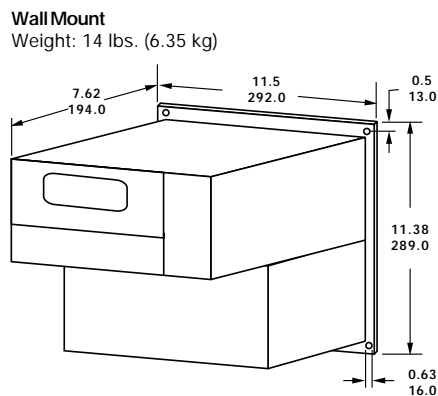
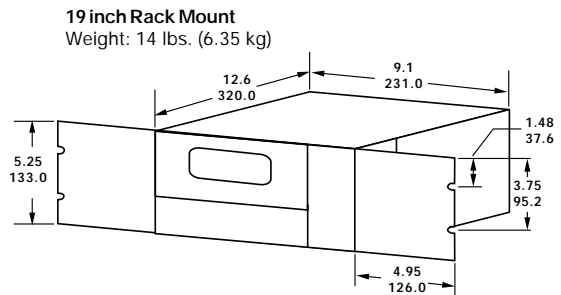
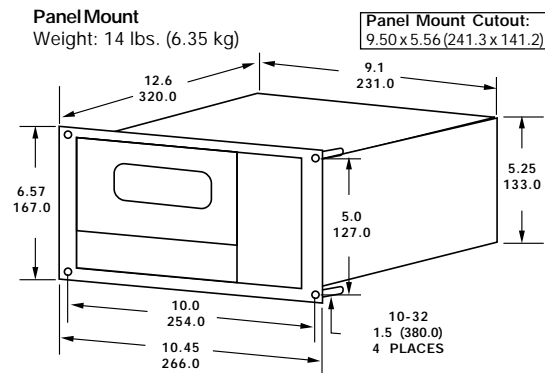
Ambient Temperature: 14°F to 122°F (-10°C to 50°C), 95% RH, non-condensing

Approvals and Certifications

UL/CSA General Safety Requirements
UL/CSA Class I, Division 2, Groups A, B, C, & D, T4
Class I, Division 1, Groups B, C, & D (optional)
CENELEC II 2 G EEx d IIC T6
Russian Gosstandart Pattern Approval
Complies with all relevant European directives

DIMENSIONS

IN
(MM)



One of a family of innovative process analyzer solutions from AMETEK Process Instruments. Specifications subject to change without notice.



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