

## 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 modern 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 a universal input power supply. The Model 5000 is compliant with all relevant UL, CSA, and European EMI, RFI, and general safety requirements. 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.



*Model 5000 Analyzer Controller*

### 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 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 / Zone 1 enclosure is also available. Installation, operation, and maintenance are simple, quick, and convenient.

# Model 5000 Analyzer Controller

## 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:**  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ ), 95% RH, non-condensing

### Approvals and Certifications

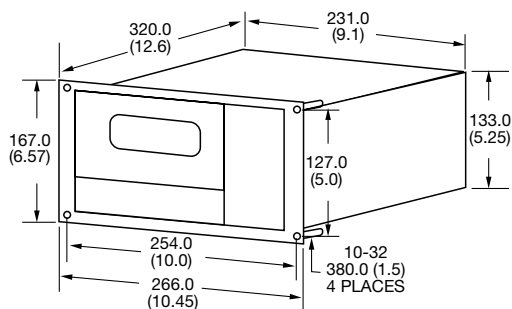
UL/CSA General Safety Requirements  
UL/CSA Class I, Division 2, Groups A, B, C, D, T4  
Class I, Division 1, Groups B, C, D / ATEX Directive:  
II 2 G EEx d IIC T6 (optional)  
Russian Gosstandart Pattern Approval  
Complies with all relevant European directives

## Dimensions

### PANEL MOUNT

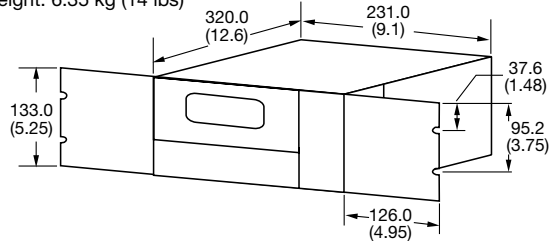
Weight: 6.35 kg (14 lbs)

Panel mount cutout:  
241.3 x 141.2 (9.5 x 5.58)



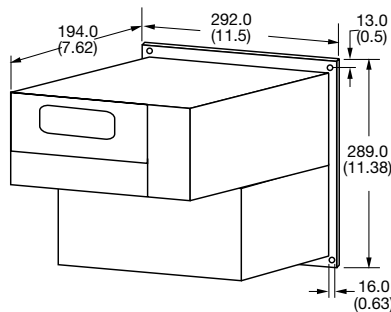
### 19 INCH RACK MOUNT

Weight: 6.35 kg (14 lbs)

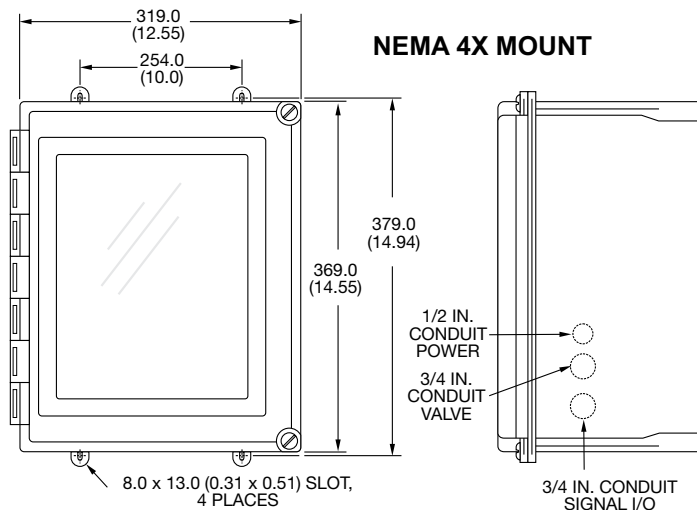


### WALL MOUNT

Weight: 6.35 kg (14 lbs)



### NEMA 4X MOUNT



**AMETEK**  
PROCESS INSTRUMENTS

455 Corporate Blvd., Newark, DE 19702  
Ph. +1-302-456-4400, Fax +1-302-456-4444  
www.ametekpi.com



© 2011, by AMETEK, Inc.  
All rights reserved. Printed in the U.S.A.  
F-0145 Rev 3 (1211)

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

### SALES AND MANUFACTURING:

**USA - Oklahoma**  
2001 N. Indianwood Ave., Broken Arrow OK 74012 • Tel: +1-918-250-7200, Fax: +1-918-459-0165

**USA - Pennsylvania**  
150 Freeport Road, Pittsburgh PA 15238 • Tel: +1-412-828-9040, Fax: +1-412-826-0399

**CANADA - Alberta**  
2876 Sunridge Way N.E., Calgary, AB T1Y 7H9 • Tel: +1-403-235-8400, Fax: +1-403-248-3550

### WORLDWIDE SALES AND SERVICE LOCATIONS:

**USA - Texas**  
Tel: +1-713-466-4900, Fax: +1-713-849-1924

**CHINA**  
Beijing / Tel: 86 10 8526 2111, Fax: 86 10 8526 2141  
Chengdu / Tel: 86 28 8675 8111, Fax: 86 28 8675 8141  
Guangzhou / Tel: 86 20 8363 4768, Fax: 86 20 8363 3701  
Shanghai / Tel: 86 21 5868 5111, Fax: 86 21 5866 0969

**FRANCE**  
Tel: 33 1 30 68 89 20, Fax: 33 1 30 68 89 29

**GERMANY**  
Tel: 49 21 59 91 36 0, Fax: 49 21 59 91 3639

**INDIA**  
Tel: 91 80 6782 3200, Fax: 91 80 6782 3232

**SINGAPORE**  
Tel: 65 6484 2388, Fax: 65 6481 6588

MOISTURE