

# EA016

ENVIRONMENTAL MEASUREMENT ADAPTER



**OPERATION MANUAL**

# **EA016**

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### **Operation Manual**

## **Guarantee and service**

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Transmille Ltd. guarantees this instrument to be free from defects under normal use and service for a period of 1 year from purchase. This guarantee applies only to the original purchaser and does not cover fuses, or any instrument which, in Transmille's opinion, has been modified, misused or subjected to abnormal handling or operating conditions.

Transmille's obligation under this guarantee is limited to replacement or repair of an instrument which is returned to Transmille within the warranty period. If Transmille determines that the fault has been caused by the purchaser, Transmille will contact the purchaser before proceeding with any repair.

To obtain repair under this guarantee the purchaser must send the instrument in its original packaging (carriage prepaid) and a description of the fault to Transmille at the address shown below. The instrument will be repaired at the factory and returned to the purchaser, carriage prepaid.

Note :

**TRANSMILLE ASSUMES NO RESPONSIBILITY FOR DAMAGE IN TRANSIT**

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Transmille Ltd.  
Unit 4, Select Business Centre  
Lodge Road  
Staplehurst  
Kent  
TN12 0QW  
United Kingdom

Tel : +44 0 1580 890700

Fax : +44 0 1580 890711

EEmail : [sales@transmille.com](mailto:sales@transmille.com)

Web : [www.transmille.com](http://www.transmille.com)

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# EA016 Environmental Measurement Adapter

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The EA016 provides an easy to use solution for the monitoring of laboratory equipment. It incorporates a robust capacitive humidity sensor with a characterised and linear output and a precision integrated circuit temperature sensor with an output voltage linearly proportional to the Celsius temperature.

The operation is controlled using a PC running either the Virtual front panel program or ProCal software.

## Main Features

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- Humidity measurement 10% to 90%
- Temperature Measurement 0°C to 50°C
- Used with Virtual Front Panel or ProCal Software

## Design Notes

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- Provides temperature measurement to an accuracy of 0.3°C
- Provides humidity measurement to an accuracy of 2%



Label Reference	Information
Model Number	Model number reference for product
Serial Number	Unique serial number for product

## Connections

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Connection to the 3000 Series adapter interface is provided via a 9-Pin D-Type connection located on the side of the adapter

## Operating Notes

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This section details operational and environmental considerations for the EA016 Environmental Adapter. Follow these instructions when operating or storing the Environmental Adapter.

## Connection Recommendations

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To connect the EA016 Environmental Adapter to the 3000 Series multi product calibrator, use the supplied adapter interface cable (9-Pin Male to 9-Pin female straight through lead) :



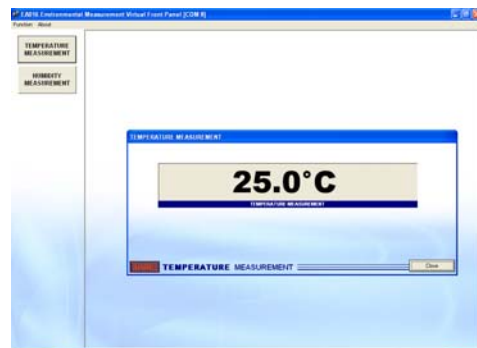
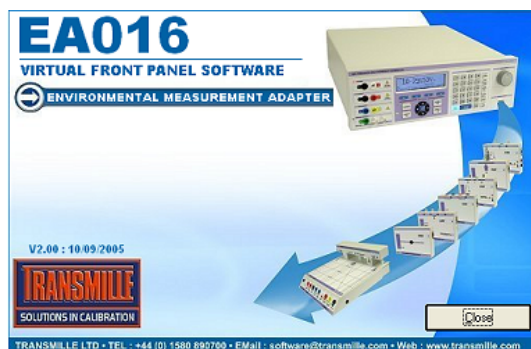
## Using the EA016 with the Virtual Front Panel Software

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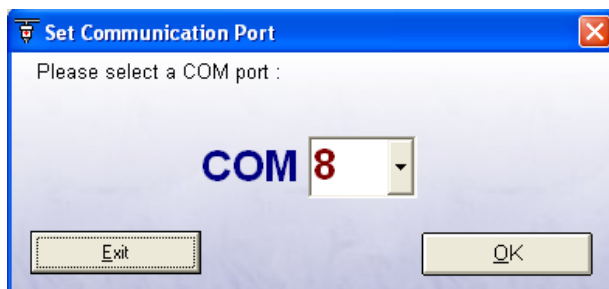
### Installing the Software

Insert the CD supplied with the EA016 Environmental Adapter – this should auto run. If it does not auto run, click START -> Run then run x:\Setup.exe where x is the drive letter of your CD drive.

Once installation is complete choose START -> ALL PROGRAMS -> EA016 Environmental Adapter to run the virtual front panel



### Selecting a COM Port



On starting the virtual front panel for the first time, a COM port selection screen will be displayed. Click on the COM port which is connected to your 3000 Series calibrator to continue.

A different COM port can be selected at any time using the **Change COM** button.



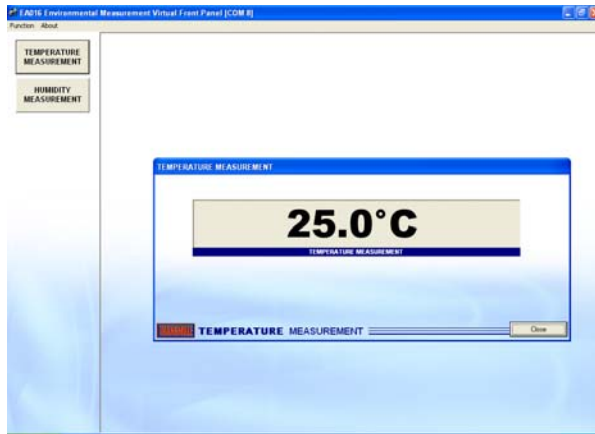
If you are using a laptop to connect to the calibrator, the COM port will usually be COM 1. A desktop computer will usually be COM 2



**Operation of the Virtual Front Panel**

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Once the correct COM port is selected, the calibrator will be detected, and the main screen displayed :



The main functions of the adapter are :

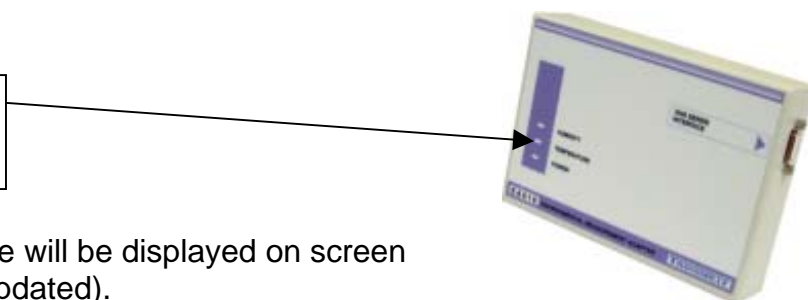
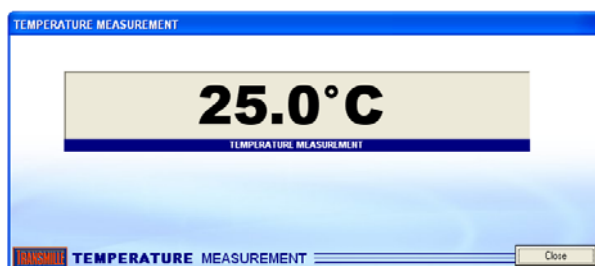
- Temperature Measurement
- Humidity Measurement

**Functions : Ambient Temperature Measurement**

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Select the temperature measurement mode by pressing the temperature measurement function button



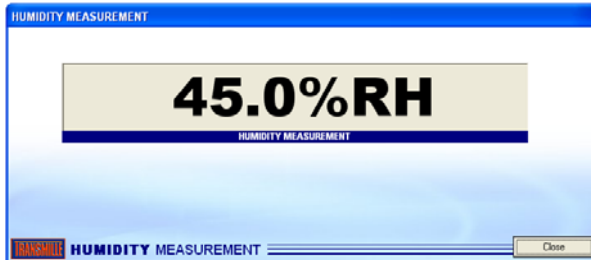
The temperature will be displayed on screen (continuously updated).

**Functions : Relative Humidity Measurement**

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**HUMIDITY  
MEASUREMENT**

Select the humidity measurement mode by pressing the humidity measurement function button



**Humidity  
Measurement  
Indicator**

The humidity will be displayed on screen  
(continuously updated)



## **Specifications**

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GENERAL SPECIFICATIONS	
Control Interface	9 Pin 'D' type connector for use with 3000 Series adapter interface
Dimensions	12cm x 7cm x 3.5cm
Weight	0.5kg

PERFORMANCE SPECIFICATIONS	
Temperature Measurement	0°C to 50°C
Accuracy	0.3°C
Humidity Measurement	10% to 90%
Accuracy	2%
Notes	Virtual Front Panel (supplied) or ProCal control

## Care & Maintenance

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The only maintenance instructions for the EA016 Environmental Adapter is periodic cleaning. See below for details on the cleaning procedure and precautions for handling.

### Cleaning the EA016

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To keep the external enclosure of the EA016 in good condition, clean the outer case with a soft cloth. Do not use any liquids in cleaning the enclosure – removal of surface dust is all that is recommended.

 **CAUTION**

Do not use cleaning fluids or solvents for cleaning as these may damage the enclosure and affect the plastic materials used in the adapter.

### Handling Precautions

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The EA016 is designed for mechanical stability, but should not be subjected to excessive shock or be dropped. Transportation is recommended using the original packaging with avoidance of extreme changes of temperature.

### Servicing Information

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The EA016 is provided certified from the factory, and uses internal sensors for temperature and humidity measurement and are not user repairable. If the instrument is damaged it should be returned to the factory for repair and recalibration.