Please Read First

TR-701NW / 701AW
TR-702NW / 702AW
TR-702NW-H / 702AW-H

Safety Precautions and Instructions

The following items should be strictly obeyed for the safe usage of this product, and for protecting yourself and other people from bodily harm and/or damage to property.

Explanation of Symbols

<Warning Symbols>

DANGER These entries are actions that, if taken, may cause serious personal physical damage or death.

CAUTION These entries are actions that if taken may lead to physical injury or damage to persons or things.

Explanation of Picture Symbols

Denotes an important warning or caution. Denotes a forbidden action. Denotes an action that should be carried out.

DANGER To Prevent Serious Accidents

Do not disassemble, repair or modify the unit and accessories.

Do not use the unit in any environment that is exposed to chemicals and harmful gases. Doing so may cause corrosion and/or other danger to the unit. Also, coming in contact with hazardous substances may cause bodily harm to the user or people nearby.

This unit is water resistant. If a water or a foreign object enters the case, immediately unplug the AC adapter and stop using it.

Do not handle the unit, remove the battery or unplug the AC adapter with wet hands.

This product has been designed for private and/or industrial use only. It should not be used in situations where strict safety precautions are necessary such as with medical equipment, or in systems directly or indirectly connected with human life or well-being.

Do not drop or expose the unit to a strong impact.

Do not connect any communication cables connected to the unit to telephone line outlets. Continued use may cause fire or electrocution.

Do not use or process the cords for the AC adapter or the communication cables. Also, do not twist, pull or swing any of the cords.

To prevent damage to the unit from static electricity, remove static electricity from your body by touching metal around you (such as a door knob and window frame) before touching the unit.

Place and store the unit and accessories out of the reach of children.

We are not responsible for any damage, malfunction or trouble, whether direct or indirect, caused by the use of our product.

Do not use any power, battery, sensor, or cable other than those specified by T&D Corporation.

Do not put anything on top of the cable and/or AC adapter. This may cause overheating.

Do not disconnect the communication cable during USB, LAN, or wireless communication. Doing so may cause adverse effects to the unit and/or PC.

Make sure that AC adapter, sensor, and cable plugs are inserted fully, so as not to cause an improper connection. Also, when unplugging the cable from the unit, do not pull the cord, but hold the connector to disconnect.

If the unit produces heat, emits smoke or a strange smell, or makes unusual noises, immediately unplug the AC adapter, remove the batteries, and stop using it. Also, unplug the unit from the PC.

If the unit is not to be used for a long period of time, remove batteries. If left in the unit, the batteries may leak and lead to malfunctioning. Install new batteries when starting or re-starting to use a unit.

CAUTION Do not place or store in the following areas:

• Areas exposed to direct sunlight
• Areas subject to condensation or wet areas
• Areas exposed to excessive vibration
• Areas exposed to excessive smoke, dust or dirt.

CAUTION Other Precautions

• Use the unit in the specified operating environment. Do not use it for any purpose other than for which it was designed.

• Condensation may occur inside the case when a unit is moved from one environment to another where there is a great difference in temperature.

• Do not use the unit in wet areas or places exposed to water such as bathroom.

• When connecting the unit to your PC, make sure to follow all warnings and directions from your computer manufacturer.

• If the unit is not to be used for a long period of time, for safety reasons please remove the battery. If left in the unit, the battery may leak and lead to malfunctioning.

• Please note that this Introductory Manual has been written based on the presupposition that details about contracts with an Internet provider, specific network environments and the set-up of any other necessary equipment to enable network connection has already been taken care of by the User and that connection has been confirmed as workable. T&D Corporation shall not be responsible for any damages which a contractor, a user or a third party may suffer, whether direct or indirect, due to the inability to communicate or use communication devices.

CAUTION Notices about Sensors

• Do not connect any sensor to the unit other than those specified by T&D Corporation.

• Make sure to use sensors within the measurement range indicated in the specifications for that sensor.

• If extremely severe temperature changes occur, it may result in large errors in humidity measurement. Once the sensor’s temperature becomes stable, the measurements will return to normal.

• Do not connect the sensor to any data logger other than those specified by T&D Corporation.

• Do not expose the sensor to a strong impact. This may adversely affect measurement accuracy and cause damage or malfunction.

• When the sensor is not to be used for a long period of time, please store it at normal temperature and humidity.

• Do not use the sensor on the human body.

• Continued use may cause a decrease in the sensor’s accuracy and sensitivity even under normal operational conditions. If the sensor is being used in a smoky or dusty environment, the surface of the sensor will accumulate impurities causing a further decrease in the sensor’s performance.

• The included sensor is not water resistant. Do not allow the sensor to become wet. If the sensor gets wet, immediately remove the sensor from the unit and wipe it with a clean cloth as soon as possible. Then allow the sensor to dry in normal room temperature before using it again.

• When using the THA-3151 in an environment where the humidity is under 30 %RH, the measurements may sometimes fluctuate. This is not abnormal.

• Do not expose to condensation, dampness, corrosive gases, or organic solvents (or insecticides for High Precision Temperature/Humidity Sensors).
### Specifications

<table>
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<tr>
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<tr>
<td><strong>Sensor (External)</strong></td>
<td><strong>Thermistor</strong></td>
<td><strong>Thermistor</strong></td>
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<tr>
<td><strong>Measurement Channels</strong></td>
<td><strong>Temperature, Humidity, 1ch, Temperature, Humidity, 1ch</strong></td>
<td><strong>Temperature, Humidity, 1ch, Temperature, Humidity, 1ch</strong></td>
</tr>
<tr>
<td><strong>Units of Measurement</strong></td>
<td>°C, °F</td>
<td>°C, °F</td>
</tr>
<tr>
<td><strong>Measurement Range</strong></td>
<td>-40 to 110°C (supplied sensor: 58 to 102°C)</td>
<td>-40 to 110°C (supplied sensor: 58 to 102°C)</td>
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<tr>
<td><strong>Accuracy</strong></td>
<td>±0.5°C (±1°C at -5°C, ±2°C at temperatures other than temperatures)</td>
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</tr>
<tr>
<td><strong>Responsiveness</strong></td>
<td>0.5°C</td>
<td>0.1°C</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>Main Power: AC Adaptor (AD-0638 or AD-06C1) / Backup Power: Coin Type Lithium Battery (CR-2032) *2</td>
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</tr>
<tr>
<td><strong>Communications</strong></td>
<td>Terminal</td>
<td>Terminal</td>
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<tr>
<td><strong>Recording Mode</strong></td>
<td>Data Log</td>
<td>Data Log</td>
</tr>
<tr>
<td><strong>Data Backup</strong></td>
<td>Approx. 3 months (backup battery only without AC adapter)</td>
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</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>155 × 80 × 37 mm</td>
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<tr>
<td><strong>Weight</strong></td>
<td>105g (TR-701AW / TR-702AW / TR-702NW-H)</td>
<td>105g (TR-702AW-H)</td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td><strong>TR-700W for Windows</strong></td>
<td><strong>TR-700W for Windows</strong></td>
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</tbody>
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### Options

**Temperature Sensor (For TR-701NW / 701AW)**

- **TR-0206 Screw-down Sensor**
  - Cable Length: 0.5m
  - Response Time (50%): Approx. 200 sec. (in air)

- **TR-0506 Stainless Protection Sensor**
  - Cable Length: 0.5m
  - Response Time (50%): Approx. 25 sec. (in air)

**Temperature Sensor: Fluoropolymer Coated Type (For TR-701NW / 701AW)**

- **TR-0506 Stainless Protection Sensor**
  - Cable Length: 0.5m
  - Response Time (50%): Approx. 25 sec. (in air)

**Temperature/Humidity Sensor (For TR-702NW / 702AW)**

- **TR-3151 Temperature/Humidity Sensor**
  - Cable Length: 5.0m
  - Response Time (90%): Approx. 7 min. (in air)

**Sensor Extension Cable**

- **TR-1206 Extension Cable**
  - Cable Length: 6.0m
  - Materials: (4) Vinyl Coated Electrical Wire

- **TR-0306 Stainless Protection Sensor**
  - Cable Length: 0.6m
  - Response Time (90%): Approx. 10 sec. (in agitated water)

- **TR-0406 Stainless Protection Sensor**
  - Cable Length: 0.6m
  - Response Time (90%): Approx. 10 sec. (in agitated water)

- **TR-0706 Stainless Protection Sensor**
  - Cable Length: 0.6m
  - Response Time (50%): Approx. 11 sec. (in air)

**AC Adapter**

- **AD-0638 (for US) / AD-06C1 (for EU)**
  - Cable Length: 1.8m
  - Input Voltage: AC100 to 240V 50/60Hz
  - Output Voltage (AD-0638): 12VDC 550mA
  - Output Voltage (AD-06C1): 12VDC 1A

### Notes about using this Product

In order to properly use the product, please carefully read all documents that accompany the product before using. T&D Corporation accepts no responsibility for any malfunction of and/or trouble with this product or with your computer that is caused by the improper handling of this product and will deem such trouble or malfunction as falling outside the conditions for the repair outlined in the attached warranty.

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- Specifications, diagrams, and other contents outlined in the attached documents are subject to change without notice.
- Please follow the safety precautions outlined in the attached documents carefully. We cannot guarantee nor are we responsible for safety if this product is used in any manner other than what is intended.
- Do not leave messages in the attached documents may vary slightly from the visual messages.
- Please notify the shop where you purchased this product or T&D Corporation of any mistakes, errors or unclear explanations in the attached documents.
- T&D Corporation accepts no responsibility for any damage or loss of income caused by the use of our product.
- Accompanying documents cannot be released, so please keep them in a safe place.
- Please read the warranty and provisions for free repair carefully.

### For product information or questions contact us at:

T&D Corporation
For product inquiries, please contact your local distributor; visit T&D Website for the distributor list.
If you can not find a distributor in your area, please contact our main office in Japan or one of our branch offices in Europe or America.

[www.tandd.com/about_tandd/contactus](http://www.tandd.com/about_tandd/contactus)