

***Wireless Temperature & Humidity sensor  
AI01HT***



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## Preface

*This document relates to technical details of the wireless (Bluetooth) sensor AI01HT measuring temperature and relative humidity. It is destined to system integrators and professionals who are familiarized with rules of repair and installation execution in vehicles and who also have special professional knowledge in electronic and electric equipment used on various transport means. Sensor's proper working conditions can only be guaranteed if it is installed and set by qualified professionals.*

Technical Support

For help and assistance please email [sales@carnetek.com.tw](mailto:sales@carnetek.com.tw)



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## TECHNICAL SPECIFICATIONS

<b>Battery power supply</b>	3 VDC - Replaceable Lithium Coin Cell Battery
<b>Frequency</b>	2,4 GHz - Bluetooth Low Energy 4.0/4.2 <ul style="list-style-type: none"><li>- Advertising" beacon mode: periodic data transmission (id + measures)</li></ul>
<b>Operating mode</b>	<ul style="list-style-type: none"><li>- Connected mode: download via android application up to 3,200 stored Temperature &amp; Humidity values</li></ul>
<b>Data Logger function</b>	Up to 3,200 records of Temperature and Humidity
<b>Power output</b>	Up to +4dBm (programmable)
<b>Transmission range</b>	Up to 80 meters (open field / + 4dBm)
<b>Transmission period</b>	0,1 to 10 second (programmable)
<b>Lifecycle</b>	1 year (Beacon rate = 10s with 0dB power) ID: 10 characters name Unique 48 bits MAC address
<b>Radio frame format</b>	<ul style="list-style-type: none"><li>- Temperature: 14 bits</li><li>- Humidity: 12 bits</li></ul>
<b>Settings &amp; configuration</b>	Interface on connected mode: Device Configurator Mobile Android App
<b>Sensor: Measuring range</b>	Temperature: -40C° to 85C° / Humidity: 0 to 100%
<b>Sensor: Resolution</b>	Temperature: ±0.01°C / Humidity: 0.025%
<b>Sensor: Accuracy</b>	Temperature: ±0.3°C TYP from -10°C to 85°C Humidity: ±2% TYP from 0% to 80%, up to ±3% from 80% to 100%
<b>Operating temperature</b>	-40°C to +85°C (Depending on the operating range of the Battery)
<b>Battery level Management</b>	1.9 V (≈15%) remaining battery LED warning <ul style="list-style-type: none"><li>- Material: Polycarbonate (UL-94HB)</li><li>- Waterproof: IP65</li><li>- Weight ≈70g</li></ul>
<b>Housing</b>	<ul style="list-style-type: none"><li>- Size: 65 x 60 x 40 mm; Top Recessed: 39 x 52 mm; Inner Size: 58 x 53 x 35 mm</li><li>- Working temp: -35°C ~ 130°C</li></ul>