





## Digital relative humidity & temperature sensor AM2301

### 1. Feature & Application:

- \*High precision
- \*Capacitive type
- \*Full range temperature compensated
- \*Relative humidity and temperature measurement
- \*Calibrated digital signal
- \*Outstanding long-term stability
- \*Extra components not needed
- \*Long transmission distance, up to 100 meters
- \*Low power consumption

### 2. Description:

AM2301 output calibrated digital signal. It applies exclusive digital-signal-collecting-technique and humidity sensing technology, assuring its reliability and stability. Its sensing elements is connected with 8-bit single-chip computer.

Every sensor of this model is temperature compensated and calibrated in accurate calibration chamber and the calibration-coefficient is saved in type of programme in OTP memory, when the sensor is detecting, it will cite coefficient from memory.

Small size & low consumption & long transmission distance(100m) enable AM2301 to be suited in all kinds of harsh application occasions.

### 3. Technical Specification:

Model	AM2301	
Power supply	3.3-5.5V DC	
Output signal	digital signal via Aosong 1-wire bus	
Sensing element	Polymer humidity capacitor	
Operating range	humidity 0-100%RH;	temperature -40~80Celsius
Accuracy	<b>humidity +-3%RH</b> (Max +-5%RH);	temperature +-0.5Celsius
Resolution or sensitivity	humidity 0.1%RH;	temperature 0.1Celsius
Repeatability	humidity +-1%RH;	temperature +-0.3Celsius
Humidity hysteresis	+-0.5%RH	
Long-term Stability	+-0.5%RH/year	
Interchangeability	fully interchangeable	

### 4. Dimensions of AM2301(unit---mm) and wiring diagram:

~~mailto:thomasliu@aosong.com~~

Thomas Liu (Sales Manager)

Email: thomasliu198518@aliyun.com , sales@aosong.com