

Ambient Temperature Sensor

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1.0 FEATURES

- Integrated on the EQP IOT platform, powered by AWS
- Measures ambient temperature in harsh environments
- Sends status and alerts to EQP IOT platform

2.0 GENERAL DESCRIPTION

The EQP Ambient Temperature Sensor is a compact, portable sensor that is rugged and battery operated. An on-board semiconductor based temperature sensing element reads the ambient temperature over a wide range. The sensor is battery powered with expected battery life up to 1 year*. Measurements are made automatically and transmitted to the EQP gateway. Alerts are provided to the user when the temperature approaches critical values (e.g. below freezing).

3.0 DEVICE CHARACTERISTICS

Absolute Maximum Ratings (†)

Vcc (USB Supply)	6.5V
Storage Temperature	-40°C to 80°C
Operating Temperature	-10°C to 60°C
ESD Protection	>2kV
Drop Height2m
Relative Humidity	Dew Point

† NOTICE: Stresses above those listed under “Absolute Maximum Ratings” may cause permanent damage to the device. This is a stress rating only and functional operation of the device at those or any other conditions above those indicated in the operational listings of this specification is not implied. Exposure to maximum rating conditions for extended periods may affect device reliability

Table 1-1: Operating Characteristics

Sym	Characteristic	Min.	Typ.	Max.	Units	Conditions
Vcc	Battery Voltage	2.8	3.7	4.2	V	-
Is	Sleep Current	-	-	5.2	uA	-
Ist	Standby Current	-	80	-	mA	-
It	Transmit Current	-	-	160	mA	-
Pd	Power Dissipation	-	-	1	W	-
Dr	Temperature Range	-10	-	60	°C	Detection Range

* Battery life is dependent on the distance from the gateway and ambient temperature