



安達思科技有限公司 AndesFit Ltd.

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Health Thermometer Application note for App developer

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Tel: 3595 1880 Fax: 2661 9845
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Device Name : TEMP

Service UDID: 1809

Characteristics UDID : 2A1C

Properties: Indicate

Characteristics Name: Temperature Measurement

Data Format:

Byte No.	Type	Description										
1	Flag Information (Mandatory)	<table><tr><td>Bit</td><td>Definition</td></tr><tr><td>0</td><td>Temperature Unit Flag<ul style="list-style-type: none">0 = Celsius1 = Fahrenheit</td></tr><tr><td>1</td><td>Time Stamp Flag<ul style="list-style-type: none">0 = field not present</td></tr><tr><td>2</td><td>Temperature Type Flag<ul style="list-style-type: none">0 = field not present1 = field present</td></tr><tr><td>3 - 7</td><td>N/A</td></tr></table>	Bit	Definition	0	Temperature Unit Flag <ul style="list-style-type: none">0 = Celsius1 = Fahrenheit	1	Time Stamp Flag <ul style="list-style-type: none">0 = field not present	2	Temperature Type Flag <ul style="list-style-type: none">0 = field not present1 = field present	3 - 7	N/A
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3 - 7	N/A											
2 - 5	Temperature Measurement Value (Celsius / Fahrenheit)	<p>Data Format: IEEE-11073 32-bit FLOAT</p> <table><tr><td></td><td>Exponent</td><td>Mantissa</td></tr><tr><td>Size</td><td>1 octet</td><td>3 octets</td></tr><tr><td>Pattern</td><td>MSB</td><td>LSB</td></tr></table> <p>Special values are assigned to express the following:</p> <ul style="list-style-type: none">+ INFINITY [exponent 0, mantissa $+(2^{23}-2) \rightarrow 0x007FFFFE$]NaN (not a number) [exponent 0, mantissa $+(2^{23}-1) \rightarrow 0x007FFFFFF$]NRes (not at this resolution) [exponent 0, mantissa $-(2^{23}) \rightarrow 0x00800000$]Reserved for future use [exponent 0, mantissa $-(2^{23}-1) \rightarrow 0x00800001$]- INFINITY [exponent 0, mantissa $-(2^{23}-2) \rightarrow 0x00800002$] <p>Example:</p>		Exponent	Mantissa	Size	1 octet	3 octets	Pattern	MSB	LSB	
	Exponent	Mantissa										
Size	1 octet	3 octets										
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		<table><tr><th>Value</th><th>Data</th></tr><tr><td>36.4 Celsius</td><td>0xFF00016C</td></tr><tr><td>34.79 Celsius</td><td>0xFE000D97</td></tr></table>	Value	Data	36.4 Celsius	0xFF00016C	34.79 Celsius	0xFE000D97																		
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6	Temperature Type	<table><tr><th>Key</th><th>Value</th></tr><tr><td>1</td><td>Armpit</td></tr><tr><td>2</td><td>Body</td></tr><tr><td>3</td><td>Ear (usually ear lobe)</td></tr><tr><td>4</td><td>Finger</td></tr><tr><td>5</td><td>Gastro-intestinal Tract</td></tr><tr><td>6</td><td>Mouth</td></tr><tr><td>7</td><td>Rectum</td></tr><tr><td>8</td><td>Toe</td></tr><tr><td>9</td><td>Tympanum (ear drum)</td></tr><tr><td>10-255</td><td>N/A</td></tr><tr><td>0</td><td>N/A</td></tr></table>	Key	Value	1	Armpit	2	Body	3	Ear (usually ear lobe)	4	Finger	5	Gastro-intestinal Tract	6	Mouth	7	Rectum	8	Toe	9	Tympanum (ear drum)	10-255	N/A	0	N/A
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9	Tympanum (ear drum)																									
10-255	N/A																									
0	N/A																									



Characteristics UDID : 2A1D

Properties: Read

Characteristics Name: Temperature Type

Data Format:

Byte No.	Type	Description	
1	Temperature Type		
		Key	Value
		2	Forehead
		9	Tympanum (ear drum)

Characteristics UDID : 2A1E

Properties: Notify

Characteristics Name: Intermediate Temperature

Data Format: N/A

Characteristics UDID : 2A21

Properties: Read / Write / Indicate

Measurement Interval

Data Format: N/A