

# Unit of Measure (UOM)

In the IoX, units of measure include the scientific units of measure as well as custom types. A unit of measure is a numeric type that fully defines a value. Values in square brackets are keywords that may be specified for the unit of measure instead of the numeric value when sending a request to ISY. The ISY will always return the numeric value for the unit of measure.

## Values

```
0 = Unit of measure is unknown
1 = ampere (amp) [amp, ampere]
2 = boolean
3 = btu/h [btuh]
4 = celsius (C) [C, celsius]
5 = centimeter (cm) [cm]
6 = cubic feet
7 = cubic feet per minute (cfm)
8 = cubic meter
9 = day
10 = days
11 = Deadbolt status
12 = decibel (db) [db]
13 = decibel A (dbA) [dbA]
14 = degree
15 = Door lock alarm
16 = european macroseismic
17 = Fahrenheit (F) [F]
18 = feet
19 = hour
20 = hours
21 = absolute humidity
22 = relative humidity
23 = inches of mercury (inHg)
24 = inches/hour
25 = index
26 = kelvin (K) [K]
27 = keyword
28 = kilogram (kg) [kg]
29 = kilovolt (kV)
30 = kilowatt (kW)
31 = kilopascal (kPa) [kpa]
32 = kilometers/hour (KPH)
33 = kilowatts/hour (kWH) [kwh]
34 = liedu
35 = liter (l)
36 = lux [lux]
37 = mercalli
38 = meter (m)
39 = cubic meters/hour
40 = meters/sec (m/s)
```

41 = milliamp (mA)  
42 = millisecond (ms)  
43 = millivolt (mV)  
44 = minute  
45 = duration in minutes  
46 = millimeters/hour (mm/hr)  
47 = month (Jan=1, Feb=2, etc.)  
48 = miles/hour (MPH)  
49 = - Reserved -  
50 = ohm [ohm]  
51 = percent  
52 = pound  
53 = Power Factor  
54 = Parts/Million (PPM)  
55 = pulse count  
56 = The raw value as reported by the device  
57 = second  
58 = Duration in seconds  
59 = seimens/meter  
60 = body wave magnitude scale  
61 = Richter scale  
62 = moment magnitude scale  
63 = surface wave magnitude scale  
64 = shindo  
65 = SML  
66 = Thermostat heat/cool state  
67 = Thermostat mode  
68 = Thermostat fan mode  
69 = US gallon  
70 = User number  
71 = UV index  
72 = volt [V, volt]  
73 = watt [W, watt]  
74 = watts/square meter  
75 = weekday (Sun=0, Sat=1, etc.)  
76 = Wind Direction in degrees  
77 = year  
78 = 0-Off 100-On, 101-Unknown  
79 = 0-Open 100-Close, 101-Unknown  
80 = Thermostat fan run state  
81 = Thermostat fan mode override  
82 = millimeter [mm]  
83 = kilometer  
84 = Secure Mode 0-Unlock 1-Lock  
85 = Ohm Meter (Electrical resistivity)  
86 = KiloOhm  
87 = cubic meter/cubic meter  
88 = Water activity  
89 = rotations/Minute (RPM)  
90 = Hertz (Hz)  
91 = Angle Position degrees relative to North Pole  
92 = Angle Position degrees relative to South Pole  
93 = Power Management Alarm  
94 = Appliance Alarm  
95 = Home Health Alarm  
96 = VOC Level  
97 = Barrier Status

98 = Insteon Thermostat Mode – For Insteon compatibility, should use 67 (Thermostat Mode)  
99 = Insteon Thermostat Fan Mode – For Insteon compatibility, should use 68 (Thermostat Fan Mode)  
100 = A Level from 0–255 e.g. brightness of a dimmable lamp  
101 = Degree multiplied by 2 (for Insteon compatibility) – For Insteon compatibility, should use 14 (degree)  
102 = Kilowatt Second (kWs)  
103 = Dollar  
104 = Cents  
105 = Inches  
106 = Millimeters per day  
107 = Raw 1-byte unsigned value  
108 = Raw 2-byte unsigned value  
109 = Raw 3-byte unsigned value  
110 = Raw 4-byte unsigned value  
111 = Raw 1-byte signed value  
112 = Raw 2-byte signed value  
113 = Raw 3-byte signed value  
114 = Raw 4-byte signed value  
115 = Most recent On style action taken for lamp control  
116 = Mile  
117 = Millibar (mb), typically used in barometric reports  
118 = Hectopascal (hPa), typically used in barometric reports  
119 = Watt Hour  
120 = Inches per day  
121 = Mole per cubic meter (mol/m<sup>3</sup>)  
122 = Microgram per cubic meter (ug/m<sup>3</sup>)  
123 = Becquerel per cubic meter (bq/m<sup>3</sup>)  
124 = Picocuries per liter (pCi/l)  
125 = Acidity (pH)  
126 = Beats per Minute (bpm)  
127 = Millimeters of mercury (for blood pressure)  
128 = Joule (J)  
129 = Body Mass Index (BMI)  
130 = Liters per hour  
131 = Decibel Milliwatts (dBm)  
132 = Breaths per minute  
133 = Kilohertz (kHz)  
134 = Meters per squared Seconds (m/sec<sup>2</sup>)  
135 = For Apparent Power, VA = Volt–Amp  
136 = For Reactive Power, VAR = Volt–Amp Reactive  
137 = NTP DateTime – Number of seconds since 1900  
138 = Pound per square inch (PSI)  
139 = 0 to 360 degrees  
140 = Milligram per liter (mg/l)  
141 = Newton (N)  
142 = US gallons per second  
143 = US gallons per minute  
144 = US gallons per hour  
145 = Text (5.4.2+)  
146 = Reserved for System Editors (Do not use) (5.4.2+)  
147 = XML  
148 = Reserved for System Editors (Do not use)  
149 = 0–360 Degree of Hue  
150 = URL for streaming video/audio/etc.  
151 = Unix Timestamp

# Special Values

## 11 = Deadbolt status

0 – Unlocked  
100 – Locked  
101 – Unknown  
102 – Jammed

## 15 = Door lock alarm

1 – Master Code Changed  
2 – Tamper Code Entry Limit  
3 – Escutcheon Removed  
4 – Key/Manually Locked  
5 – Locked by Touch  
6 – Key/Manually Unlocked  
7 – Remote Locking Jammed Bolt  
8 – Remotely Locked  
9 – Remotely Unlocked  
10 – Deadbolt Jammed  
11 – Battery Too Low to Operate  
12 – Critical Low Battery  
13 – Low Battery  
14 – Automatically Locked  
15 – Automatic Locking Jammed Bolt  
16 – Remotely Power Cycled  
17 – Lock Handling Completed  
19 – User Deleted  
20 – User Added  
21 – Duplicate PIN  
22 – Jammed Bolt by Locking with Keypad  
23 – Locked by Keypad  
24 – Unlocked by Keypad  
25 – Keypad Attempt outside Schedule  
26 – Hardware Failure  
27 – Factory Reset  
28 = Manually Not Fully Locked  
29 = All User Codes Deleted  
30 = New User Code Not Added (Duplicate Code)  
31 = Keypad Temporarily Disabled  
32 = Keypad Busy  
33 = New Program Code Entered  
34 = RF Unlock With Invalid User Code  
35 = RF Lock With Invalid User Codes  
36 = Window/Door Is Open  
37 = Window/Door Is Closed  
38 = Window/Door Handle Is Open  
39 = Window/Door Handle Is Closed

40 = User Code Entered On Keypad

41 = Power Cycled

## 66 = Thermostat heat/cool state

0 – Idle  
1 – Heating  
2 – Cooling  
3 – Fan Only  
4 – Pending Heat  
5 – Pending Cool  
6 – Vent  
7 – Aux Heat  
8 – 2nd Stage Heating  
9 – 2nd Stage Cooling  
10 – 2nd Stage Aux Heat  
11 – 3rd Stage Aux Heat

## 67 = Thermostat mode

0 – Off  
1 – Heat  
2 – Cool  
3 – Auto  
4 – Aux/Emergency Heat  
5 – Resume  
6 – Fan Only  
7 – Furnace  
8 – Dry Air  
9 – Moist Air  
10 – Auto Changeover  
11 – Energy Save Heat  
12 – Energy Save Cool  
13 – Away  
14 = Program Auto  
15 = Program Heat  
16 = Program Cool

## 68 = Thermostat fan mode

0 – Auto  
1 – On  
2 – Auto High  
3 – High  
4 – Auto Medium  
5 – Medium

6 – Circulation  
7 – Humidity Circulation  
8 = Left & Right Circulation  
9 = Up & Down Circulation

10 = Quiet

## 76 = A 1-360 degree clockwise Wind Direction

0 = No Wind  
90 = East  
180 = South  
270 = West  
360 = North

## 80 = Thermostat fan running state

0 – Off  
1 – On  
2 – On High  
3 – On Medium  
4 – Circulation  
5 – Humidity Circulation  
6 – Right/Left Circulation  
7 – Up/Down Circulation  
8 – Quiet Circulation

## 93 = Power Management Alarm

1 – Power Applied  
2 – Ac Mains Disconnected  
3 – Ac Mains Reconnected  
4 – Surge Detection  
5 – Volt Drop Or Drift  
6 – Over Current Detected  
7 – Over Voltage Detected  
8 – Over Load Detected  
9 – Load Error  
10 – Replace Battery Soon  
11 – Replace Battery Now  
12 – Battery Is Charging  
13 – Battery Is Fully Charged  
14 – Charge Battery Soon  
15 – Charge Battery Now

## 94 = Appliance Alarm

1 – Program Started  
2 – Program In Progress  
3 – Program Completed  
4 – Replace Main Filter  
5 – Failure To Set Target Temperature  
6 – Supplying Water  
7 – Water Supply Failure  
8 – Boiling  
9 – Boiling Failure  
10 – Washing  
11 – Washing Failure  
12 – Rinsing  
13 – Rinsing Failure  
14 – Draining  
15 – Draining Failure  
16 – Spinning  
17 – Spinning Failure  
18 – Drying  
19 – Drying Failure  
20 – Fan Failure  
21 – Compressor Failure

## 95 = Home Health Alarm

1 – Leaving Bed  
2 – Sitting On Bed  
3 – Lying On Bed  
4 – Posture Changed  
5 – Sitting On Edge Of Bed

## **96 = VOC Level**

- 1 – Clean
- 2 – Slightly Polluted
- 3 – Moderately Polluted
- 4 – Highly Polluted

## **97 = Barrier Status**

- 0 – Closed
- 1-99 – Percent Closed (1% = almost Closed, 99% = almost Open)
- 100 – Open
- 101 – Unknown
- 102 – Stopped
- 103 – Closing
- 104 – Opening

## **98 = Insteon Thermostat mode**

- 0 – Off
- 1 – Heat
- 2 – Cool
- 3 – Auto
- 4 – Fan Only
- 5 – Program Auto
- 6 – Program Heat
- 7 – Program Cool

## **99 = Insteon Thermostat fan mode**

- 7 – On
- 8 – Auto

## **115 = Most recent On style action taken for lamp control**

- 0 – On
- 1 – Off
- 2 – Fade Up
- 3 – Fade Down

- 4 – Fade Stop
- 5 – Fast On
- 6 – Fast Off
- 7 – Triple Press (On)
- 8 – Triple Press (Off)
- 9 – 4 x Press (On)
- 10 – 4 x Press (Off)
- 11 – 5 x Press (On)
- 12 – 5 x Press (Off)