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| Re: |  |
| Abstract | This contribution illustrates the basic JSON schema structure for representing biosensor information in the physical world in a standardized data format. The semantics and examples of the environmental sensor information are presented. |
| Purpose | To start discussion on purpose of the standard |
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# Data formats for biosensors

## Blood pressure sensor

### General

This sub-clause specifies a sensor data type, which describes a blood pressure.

### Syntax

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| --- |
| "bloodPressureSensorType": {  "type": "object",  "properties": {  "systolicBP": {  "type": "number"  },  "diastolicBP": {  "type": "number"  },  "MAP": {  "type": "number"  }  }  }, |

### Semantics

Semantics of the bloodPressureSensorType:

| *Name* | *Definition* |
| --- | --- |
| bloodPressureSensorType | Tool for describing sensed information with respect to a blood pressure sensor. |
| systolicBP | Describes the sensed value of the systolic blood pressure with respect to the millimeters of mercury (mmHg). |
| diastolicBP | Describes the sensed value of the diastolic blood pressure with respect to the millimeters of mercury (mmHg). |
| MAP | Describes the sensed value of the mean arterial pressure with respect to the millimeters of mercury (mmHg). |

### Examples

In this example, the systolic blood pressure measured by the blood pressure sensor is 121, the diastolic blood pressure is 83, and the mean arterial pressure is 100.

|  |
| --- |
| {  “sensedInfoBaseAttributes”: {},  “bloodPressureSensorType”: {  “systolicBP”: 121,  “diastolicBP”: 83,  “MAP”: 100,  }  } |

## Heart rate sensor

### General

This sub-clause specifies a sensor data type, which describes a heart rate.

### Syntax

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| --- |
| "heartRateSensorType": {  "type": "object",  "properties": {  "value": {  "type": "number"  }  },  "required": [  "value"  ]  }, |

### Semantics

Semantics of the heartRateSensorType:

| Name | Definition |
| --- | --- |
| heartRateSensorType | Tool for describing sensed information with respect to a heart rate sensor. |
| value | Describes the sensed value of the heart rate with respect to the beats per minute (BPM). |

### Examples

In this example, the heartbeat value measured by the heart rate sensor is 98 BPM.

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| --- |
| {  “sensedInfoBaseAttributes”: {},  “heartRateSensorType”: {  “value”: 98,  }  } |