

# JJ CanSat Team Base Station JSON protocol

## "Message type" : (String)

Indicates what is in the frame.

- "STANDARD\_DATA" – standardized sensors measurements.
- "ERROR" : - information about error.
- "CONF\_REQUEST" – message aimed to obtain configuration data.

## Standard data

- "TEMP\_CAN" : Temperature measured by CanSat. (Float)
- "TEMP\_BASE" : Temperature measured by Base Station. (Float)
- "PRESS\_CAN" : Pressure measured by CanSat. (Float)
- "PRESS\_BASE" : Pressure measured by Base Station. (Float)
- "X\_ROT" : X axis CanSat rotation. (Float)
- "Y\_ROT" : Y axis CanSat rotation. (Float)
- "Z\_ROT" : Z axis CanSat rotation. (Float)
- "ALT\_BASE" : Altitude measured by Base Station. (Float)
- "GPS\_N" : N GPS CanSat coordinate. (Float)
- "GPS\_E" : E GPS CanSat coordinate. (Float)
- "WIND\_SPEED" : Wind speed measured by CanSat. (Float)
- "AIR\_HUM" : Air humidity measured by CanSat. (Float)

## Error

- "ERROR\_TYPE" : Information about occurred error. (String)

## Example frame

```
{  
  "Message type" : "STANDARD_DATA",  
  "TEMP_CAN" :1,  
  "TEMP_BASE" : 1,  
  "PRESS_CAN" : 1,  
  "PRESS_BASE" :1,  
  "X_ROT" : 1,  
  "Y_ROT" : 1,  
  "Z_ROT" :1,  
  "ALT_BASE" :1,  
  "GPS_N" : 1,  
  "GPS_E" : 1,  
  "WIND_SPEED": 1,  
  "AIR_HUM": 1  
}
```

```
{  
  "Message type" : "ERROR",  
  "ERROR_TYPE" : "SDCARD_ERROR"  
}
```

```
{  
  "Message type" : "CONF_REQUEST"  
}
```