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com.kauailabs.navx.ftc

## Enum AHRS.DeviceDataType

* java.lang.Object
  + java.lang.Enum<[AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html)>
    - com.kauailabs.navx.ftc.AHRS.DeviceDataType
* All Implemented Interfaces: java.io.Serializable, java.lang.Comparable<[AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html)> Enclosing class: [AHRS](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.html)  
    
  public static enum AHRS.DeviceDataType  
  extends java.lang.Enum<[AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html)>  
  The DeviceDataType specifies the type of data to be retrieved from the sensor. Due to limitations in the communication bandwidth, only a subset of all available data can be streamed and still maintain a 50Hz update rate via the Core Device Interface Module, since it is limited to a maximum of one 26-byte transfer every 10ms. Note that if all data types are required,

### Enum Constant SummaryEnum Constants

|  |
| --- |
| * + Enum Constant and Description |
| * + [kAll](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html#kAll) All processed and raw data, sensor status and timestamps. |
| * + [kProcessedData](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html#kProcessedData) (default): All 6 and 9-axis processed data, sensor status and timestamp |
| * + [kQuatAndRawData](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html#kQuatAndRawData) Unit Quaternions and unprocessed data from each individual sensor. |

### Method SummaryAll Methods Static Methods Instance Methods Concrete Methods

|  |  |
| --- | --- |
| * + Modifier and Type | * + Method and Description |
| * + int | * + [getValue](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html#getValue--)() |
| * + static [AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html) | * + [valueOf](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html#valueOf-java.lang.String-)(java.lang.String name) Returns the enum constant of this type with the specified name. |
| * + static [AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html)[] | * + [values](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html#values--)() Returns an array containing the constants of this enum type, in the order they are declared. |

### Methods inherited from class java.lang.Enumclone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

### Methods inherited from class java.lang.ObjectgetClass, notify, notifyAll, wait, wait, wait

### Enum Constant Detail

#### kProcessedData public static final [AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html) kProcessedData (default): All 6 and 9-axis processed data, sensor status and timestamp

#### kQuatAndRawData public static final [AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html) kQuatAndRawData Unit Quaternions and unprocessed data from each individual sensor. Note that this data does not include a timestamp. If a timestamp is needed, use the kAll flag instead.

#### kAll public static final [AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html) kAll All processed and raw data, sensor status and timestamps. Note that on a Android-based FTC robot using the "Core Device Interface Module", acquiring all data requires to I2C transactions.

### Method Detail

#### values public static [AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html)[] values() Returns an array containing the constants of this enum type, in the order they are declared. This method may be used to iterate over the constants as follows: for (AHRS.DeviceDataType c : AHRS.DeviceDataType.values())   System.out.println(c); Returns: an array containing the constants of this enum type, in the order they are declared

#### valueOf public static [AHRS.DeviceDataType](http://docs.google.com/com/kauailabs/navx/ftc/AHRS.DeviceDataType.html) valueOf(java.lang.String name) Returns the enum constant of this type with the specified name. The string must match *exactly* an identifier used to declare an enum constant in this type. (Extraneous whitespace characters are not permitted.)Parameters: name - the name of the enum constant to be returned. Returns: the enum constant with the specified name Throws: java.lang.IllegalArgumentException - if this enum type has no constant with the specified name java.lang.NullPointerException - if the argument is null

#### getValue public int getValue()

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