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## Generic String and Integer Key/Value Device Model

DeviceType: tmaKeyValue

Model: V01

**ManufacturerId:** TMAKeyValue **ManufacturerName:** TMAKeyValue

**Protokoll:** CoAP

Device-Model

ServiceName: StringData

```
Attributes
StringKey (length 20)
StringValue (length 200)
Commands
Request
StringParamKey (length 20)
StringParamValue (length 200)
Response
StringResponse (length 200)
```

ServiceName: IntData

```
Attributes
    IntKey (string/length 20)
    IntValue (int)

Commands
    Request
        IntParamKey (string/length 20)
        IntParamValue (int)

Response
        IntResponse (int)
```

## CIG Plugin

Data Reports (Device to ALLIoT)

\*\*\*Message ID: 00 \*\*\* StringData

```
00<KEY_LEN><KEY><VALUE_LEN><STRING_VALUE>
```

## Response:

AA00

#### Message ID 01 IntData

01<KEY\_LEN><KEY><INT\_VALUE>`

#### Response

AA01

Commands (ALLIoT to Device)

Command: StringCmd
Message ID 02 Request:

02<KEY\_LEN><KEY><VALUE\_LEN><STRING\_VALUE><MID>

Message ID 04 Response:

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04<ERRCODE><MID><STRING\_RESPONSE>

# Command IntCmd Message ID 03 Request

03<KEY\_LEN><KEY><INT\_VALUE><MID>

#### Message ID 05 Response

05<ERRCODE><MID><INT\_RESPONSE>

#### Parameter

Name	Type	Len [Byte]	Description
KEY_LEN	int8u	1	
KEY	String	0200	
VALUE_LEN	Int8u	1	
STRING_VALUE	String	0200	
INT_VALUE	Int16s	2	
ERRCODE	Int8u	1	00 Success, 01 Error
MID	Int16u	2	Command Identifier for Request/Response
STRING_RESPONSE	String	0200	
INT_RESPONSE	Int16s	2	

## Examples

Ascii to Hex Converter: https://www.binaryhexconverter.com/ascii-text-to-hex-converter

## Send Data (Device to ALLIoT)

Send String Message

Key=City (Hex: 43697479 / 4 Byte) Value=Wattens (Hex: 57617474656e73 / 7 Byte)

Commando	len	Message ID	Key_len	Key	value_len	value
AT+QLWULDATA=	14,	00	04	43697479	07	57617474656e73

AT+QLWULDATA==14,"0004436974790757617474656e732"

#### Send Json String

Key=SensorData Value={"Temp":22.3,"Hum":20,"Weight":23}

Commando	len	Message ID	Key_len	Key	value_len	value
AT+QLWULDATA=	47,	00	0A	53656e736f7244617461	33	3a32322e332c2248756d223a32302c22576569676874223a.

AT+QLWULDATA=47, "000A53656e736f7244617461227b2254656d70223a32322e332c2248756d223a32302c22576569676874223a32337d"

## Send IntData

Key=Temp (hex: 010454656d7 / 4 Byte) Value=22.3 °C / raw 223

Commando	len	Message ID	Key_len	Key	value
AT+OLWULDATA=	08,	01	04	010454656d7	00DF

AT+QLWULDATA=8,"010454656d7000DF"