![m2mLOGGER® remote monitoring eco-system]

EZLink RTU
Installation Manual

Version 1.1

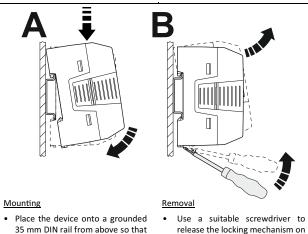www.m2mlogger.com
sales@m2mlogger.com

CONNECTIONS

#	Description
1	Micro SIM
2	GPRS Antenna
3	Terminals
4	DIN Snap-on foot

MOUNTING

Mounting

- Place the device onto a grounded 35 mm DIN rail from above so that the upper housing slot hooks onto the top edge of the DIN rail (A).
- Press the device carefully at the top of the housing towards the mounting surface.
- Once the snap-on foot has audibly snapped onto the DIN rail, check whether it is securely attached.

Removal

- Use a suitable screwdriver to release the locking mechanism on the snap-on foot of the device (B).
- Hold the device at the housing cover and carefully tilt it upwards.
- Carefully lift the device off the DIN rail.

SMS COMMANDS

1. DEVICE DETAILS

This command is used to query the Device profile details: Model, Firmware version, Serial no., IMEI, IMSI, Service Provider Name (SPN), APN, Signal Strength (RSSI).

Query

```
STATUS?
```

Response format

```
[MODEL] [(FIRM_VER)]
[SERIAL]
[IMEI]
[IMSI]
[SPN],[APN]
[CSQ]
```

[MODEL]	EZLink Model	String
[FIRM_VER]	EZLink Firmware Version	String
[SERIAL]	EZLink Serial number	String
[IMEI]	International Mobile Station Equipment Identity	Decimal
[IMSI]	International Mobile Subscriber Identity	Decimal
[SPN]	Service Provider Name	String
[APN]	Access Point Name	String
[CSQ]	Signal Strength RSSI level	Decimal

Example response

```
EZLinkRTU (v 1.0)
```

```
SL: XXXXXXXXXX
IMEI: XXXXXXXXXX09481
IMSI: XXXXXXXXXX41073
SPN : Vodafone,APN : www
RSSI: 25
```

2. GPRS SETTINGS

This command is used to set/query GPRS settings to the device, required for GPRS connection. Device contains list of pre-configured APN's for known service providers. Manual APN settings can also be provided to override default settings.

Set

```
SETTINGS-GPRS:[APN],[UID],[PWD],
```

[APN]	GPRS Access Point Name	String
[UID]	GPRS User Id	String
[PWD]	GPRS Password	String

Response

For Valid settings

```
SETTINGS SAVED
```

For Invalid settings

```
SETTINGS INVALID
```

Query

```
SETTINGS-GPRS?
```

Response format

```
[APN],[UID],[PWD],
```

Example

```
gprs:www,,,
```

3. IO MAPPING SETTINGS

This command is used to set/query the IO Mapping details.

Set/Update

```
IO-MAPPING-
[INDEX]:[NAME],[UNIT],[PREC],[DT],[CHT],[CMD],[SCL],[ZPV],
[ZSV],[SPV],[SSV],
```

[INDEX]	Position of parameter in IO Config. 0: Analog Input 1 1: Analog Input 2	Decimal
[NAME]	Parameter Name	String
[UNIT]	Parameter Unit	String
[PREC]	Parameter precision (Default: 2)	Decimal
[DT]	Data Type short: Integer 16 bit	String
[CHT]	Channel Type ai: Analog Input	String
[CMD]	Channel Command For [CHT] = "ai": [CMD] is used to select the analog input channel. Range 0 to 1	Decimal
[SCL]	Scaling relation nul: No Scaling lnr: Linear two-point scaling	String
[ZPV]	Zero Process Value	Decimal
[ZSV]	Zero Scaled Value	Decimal
[SPV]	Span Process Value	Decimal
[SSV]	Span Scaled Value	Decimal

Response

```
IO MAPPING SAVED! MEM RESET!
```
Valid IO Mapping Response

```
IO MAPPING SAVED! MEM RESET!
```
Invalid IO Mapping Response

```
INVALID FORMAT!
```

<u>Example: Analog Input</u>

```
IO-MAPPING-0:A1,mA,2,short,ai,0,lnr,0,0,1000,100,
```

Query

```
IO-MAPPING-[INDEX]?
```

<u>Response format</u>

```
[NAME],[UNIT],[PREC],[DT],[CHT],[CMD],[SCL],[ZPV],[ZSV],[SPV]
,[SSV],
```
Valid Index Response

```
A1,A,2,short,ai,0,lnr,0,0,1000,100,
```
Invalid Index Response

```
INVALID PARAMETER!
```

<u>Example</u>

```
IO-MAPPING-0?
```

4. SCANNING LOOP INTERVAL

This command is used to set/query the Scanning Loop Interval of the device.

Note: Loop Time is in seconds
Example: Loop Time = 300, to scan data every 05 minutes (05x60)
                      Loop Time = 600, to scan data every 10 minutes. (10x60)

Set

```
SETTINGS-loop:[LOOP_TIME],
```
  [LOOP_TIME]   Scanning Loop interval   Decimal

<u>Response</u>

```
SETTINGS SAVED
```

<u>Example</u>

```
SETTINGS-loop:300,
```

Query

```
SETTINGS-loop?
```

<u>Response format</u>

```
loop:[LOOP_TIME],
```

<u>Example response</u>

```
loop:300,
```

5. FTP SETTINGS

This command is used to set/query the FTP account details on which file will be uploaded.

Set

```
SETTINGS-FTP:[URL],[PORT],[UID],[PWD],[DIR],[MODE],
```
  [URL]   FTP Server address   String
  [PORT]   FTP Server Port   Decimal
  [UID]   FTP account user name   String

  [PWD]   FTP account password   String
  [DIR]   FTP remote file upload directory   String
  [MODE]   FTP file upload mode   String
                                 app: Append to existing file.
                                 new: Create New file.

<u>Response</u>

For Valid settings

```
SETTINGS SAVED
```
For Invalid settings

```
SETTINGS INVALID
```

<u>Example</u>

```
SETTINGS-ftp:files.host.com,21,acct,password,"/Data/",app,
```

Query

```
SETTINGS-FTP?
```

<u>Response format</u>

```
ftp:[URL],[PORT],[UID],[PWD],[DIR],[MODE],
```

<u>Example response</u>

```
ftp:files.host.com,21,acct,password,"/Data/",app,
```

6. MEMORY RESET

This command is used to reset the memory read / write pointers.

Note: If IO Mapping is changed, we should perform MEMRESET.

<u>Format</u>

```
MEMRESET
```

<u>Response</u>

```
DONE!
```

7. REBOOTING THE DEVICE

This command is used to reboot the device.

<u>Format</u>

```
RESET
```

<u>Response</u>

Upon receiving RESET message from Server, EZLink device restarts. There is no reply to this message.

LED INDICATIONS

Status	Description
Solid	In configuration mode
Blink every 1 sec	GPRS network registered
Blink every 200ms	Data transmission to server.

TROUBLESHOOTING GUIDE

1. SIM IS WORKING IN PHONE BUT NOT IN EZLINK
Cause 1: EZLink was power was ON while inserting the SIM.
Solution: EZLink needs to be serviced at M2MLogger

Cause 2: SIM card is not inserted properly.
Solution: Power off EZLink, eject the SIM and clean SIM contacts.

Cause 3: 2G network is not available.
Solution: Check with a SIM of different Service Provider with a working 2G network in area.

Note: For SIM detection in EZLink call on the phone number and wait for ringing tone.

2. DATA IS COMING AS N.A.
Cause: Due to over and under scaling of analog input.
Solution: Manually check the 4-20mA at the site and adjust the scaling accordingly.

3. DATA PLAN IS THERE IN THE SIM, BUT FILES ARE NOT UPLOADING TO SERVER
Cause 1: Wrong FTP configuration
Solution: Check the spelling or unwanted spacing in the FTP configurations

Cause 2: Memory Issue
Solution: Reset memory using MEMRESET SMS command.