trumeter
innovation by design

IOT
GATEWAY
ETHERNET/4G/LTE

Quickstart Guide

CE ✓RoHS UK CA

CONTENTS

1. DEVICE LIGHT SUMMARY

Name	Status	4G Gateway	Ethernet Gateway
NETWORK STATUS	2000ms off / 300ms on 300ms off / 300ms on		No cable connection
	OFF	No cellular network	
	ON	Router is initialising	Ethernet link established
	1000ms off 1000ms on	Cellular network is initialising	DNS error
	1500ms off 100ms on 100ms off 100ms on	SIM card error	
	200ms off 200ms on	Getting IP from cellular network	
	500ms off, 500ms on	Cellular connection established	
SEND	OFF	No Cloud link	No Cloud link
	ON	Cloud link established	Cloud link established
	Flashing	Sending data	Sending data
RECEIVE	OFF	No Cloud link	No Cloud link
	ON	Cloud link established	Cloud link established
	Flashing	Receiving data	Receiving data
POWER	OFF	No power to device	No power to device
	ON	Device is powered	Device is powered

2. DEVICE DIAGRAM
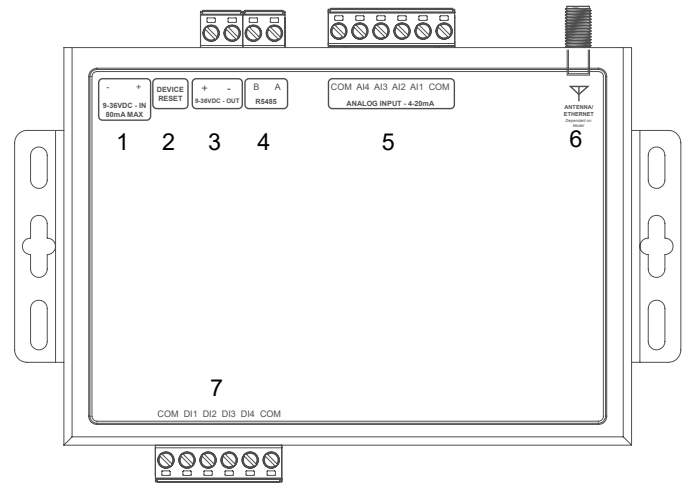
1. **DC power supply**: 5.5*2.5mm, 9-36V
2. **Device Reset**: Reset button
3. **Power Supply Output**: Loop back (directly connected to power supply input terminal)
4. **Serial Port**: RS485, 5.08mm terminal block plug-in
5. **Analog Input**: AI1~44 current input detection
6. **Antenna**: Main antenna
7. **Digital Input**: DI1~DI4 is 4 way dry/wet node input detection

3. HARDWARE CONFIGURATION

i. Device Wiring

1. Wire selected APM meters 4-20ma connections to router
2. Wire selected APM meters digital outputs (for alarm feature) to router
3. Configure meters to ensure alarms are set (APM configurator)
4. Plug multi adaptor into router **without power**
5. Check all wiring connections are correct

ii. Powering Device

1. Power router by plugging in multi adaptor
2. Check and wait for network connection
3. Confirm Analog Input and Digital Input connection LED's depending on how many meters connected to router

iii. Device Mounting

1. Attach IoT Router to wall and or cabinet
2. Connect antenna to router via screw terminal
3. Place antenna outside of any metal enclosure to ensure best reception

4. CLOUD ACCESS

To access Trumeter Cloud dashboard, go to

There are two types of user account:
1. Customer User
2. Read-only User

A **Customer User** can create and modify parameters within the dashboard including adding and managing gateways and users.

A **Read Only** user has access to the dashboard and can view and monitor parameters from a gateway.

i. Registering a Customer User Account

1. Go to
2. Click **Sign Up** to go to the registration screen
3. Once registered a confirmation email will be sent to the email address used for the account
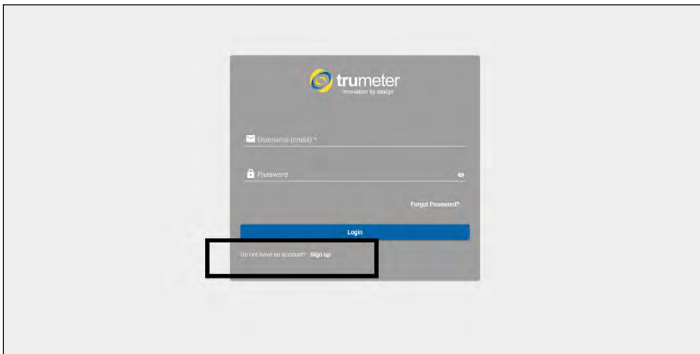

ii. Adding a New User

1. Go to
2. Login as Customer User
3. Go to User Groups > Self Registration Users
4. Click on "+" and create new user
5. You can activate the user or send an email with activation link to the email address used for the new account. See full manual for assigning read only permissions
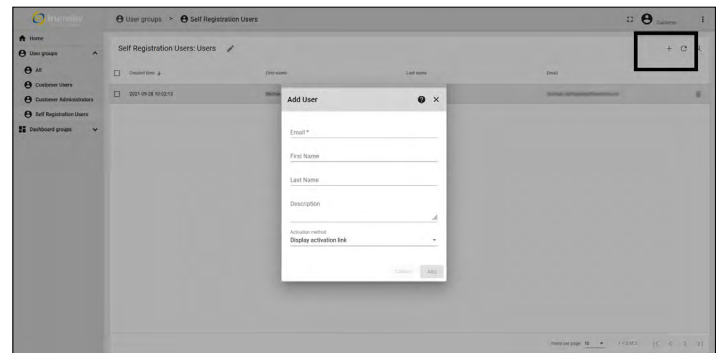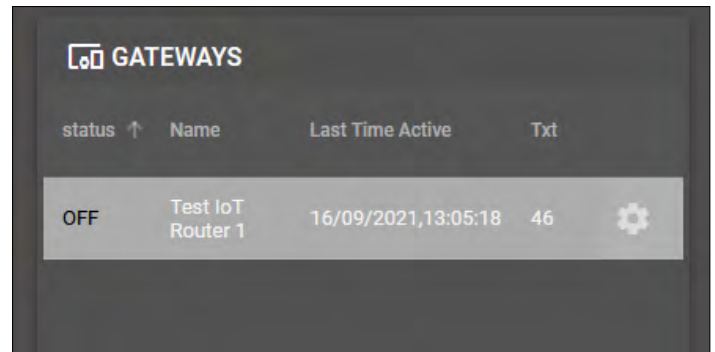
iii. Adding a New Gateway

1. Go to
2. Open dashboard as Customer User
3. Add unique serial code and model in the "add new gateway"
4. Device will be claimed and added to the list of gateways
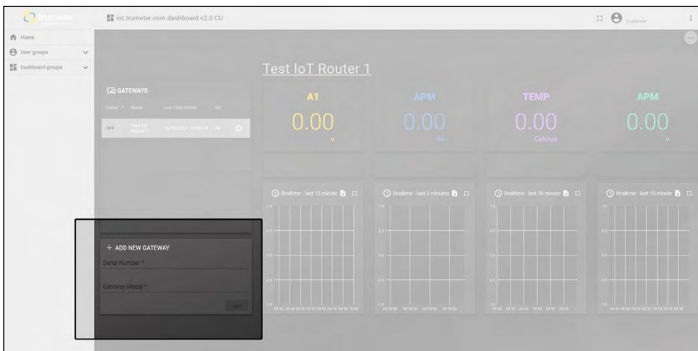

iv. Editing Gateway Configuration

1. Go to
2. Open dashboard as Customer User
3. Click cog on the gateway you want to configure
4. Change configuration and click save when done

5. ALARM SETUP

1. Set APM alarm output thresholds using **APM configurator**
2. Ensure wiring from APM output to Digital Input on gateway
3. When triggered, alarms will appear on the cloud dashboard assigned to the APM
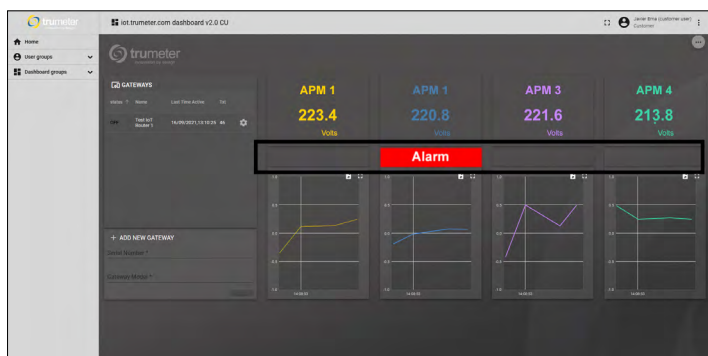
i. SMS and Email Setup

1. Go to
2. Login as Customer User
3. Click on the "cog" on the gateway you want to add SMS or email
4. If you leave it blank it will not send (SMS or Email)
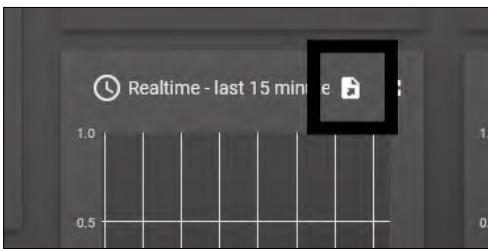5. If you have made an error when editing, the dashboard will tell you that the message is not being sent
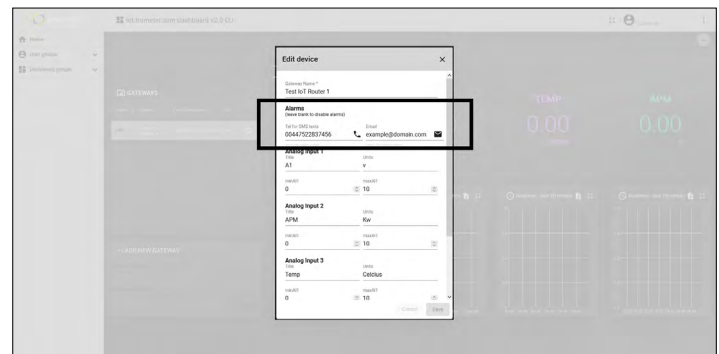
6. In the Gateway list you can see the number of texts you have left this month (**Txt**)
7. If there has been an error in the text and the message is not sent, the text will not be counted

GATEWAYS

status ↑	Name	Last Time Active	Txt	
OFF	Test IoT Router 1	16/09/2021,13:05:1	46	⚙
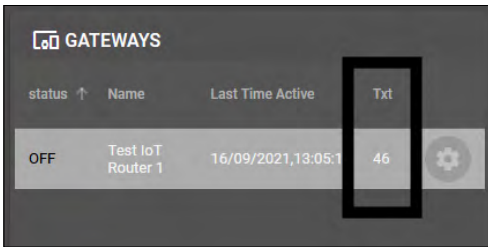
ii. Graph Visualization and Data Export

1. Go to
2. Open dashboard as Customer User
3. Click on "Export Widget Data" to export in either CSV, XLS or XLSX

🕐 Realtime - last 15 minute 📄

6. WIRING DIAGRAM

PSU

Analog 4-20mA

GND/COM

Digital Alarm

DEVICE RESET

9-36VDC - IN 80mA MAX.

9-36VDC - OUT

B A
RS485

COM AI4 AI3 AI2 AI1 COM
ANALOG INPUT - 4-20mA

ANTENNA/ETHERNET
Dependent on Model

GND
DOUT2
AOUT
DOUT1
RS485-A
RS485-B

IO1 DO2 DO3 DO4
ERFACES

COM DI1 DI2 DI3 DI4 COM

PSU   CURRENT   VOLTS / FREQ

EXAMPLE APM