UMTS-GEOL

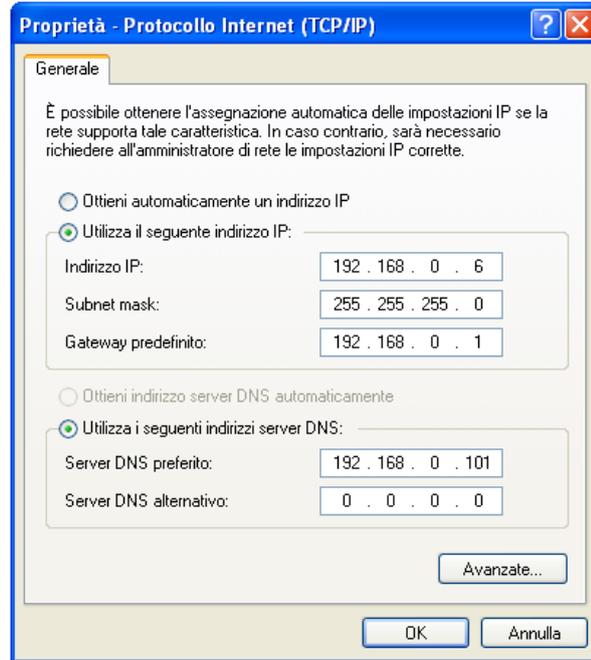**TECHNICAL FEATURES**

Router Module

UMTS-GEOL CONFIGURATION

This manual describes the settings of the Router, the SIM card and the G801 or G802 in order to carry out command and/or data communication between the PC and the G801 or G802 via the Internet.

- Required materials: - PC   - Ethernet LAN cable   - Router
   - Antenna   - 12V power supply   - SIM card

- ROUTER SETUP
1. Disable Wi-Fi of the PC.
2. Disable DHCP of the PC.
3. Disconnect the PC from the local network by physically unplugging the Ethernet LAN cable.
4. Change the PC's IP address to the same class as the router, "192.168.0.xxx" (with xxx between 2 and 255). See figures below.
   It is not necessary to set the DNS server.
5. Connect your PC to the Router via Ethernet cable.
6. Wire the 2 antennas to the Router.
7. Insert the sim card connector to the Router.
8. Supply power to the Router via the 12 V power cord.
9. From your PC, connect to the Router's configuration page by entering (in your browser) the default IP address: 192.168.0.1.
10. You will be asked to enter your username and password, by default they are:

> **User ID: admin**
> **Password: Teltonika01**

11. The following screen will be displayed:
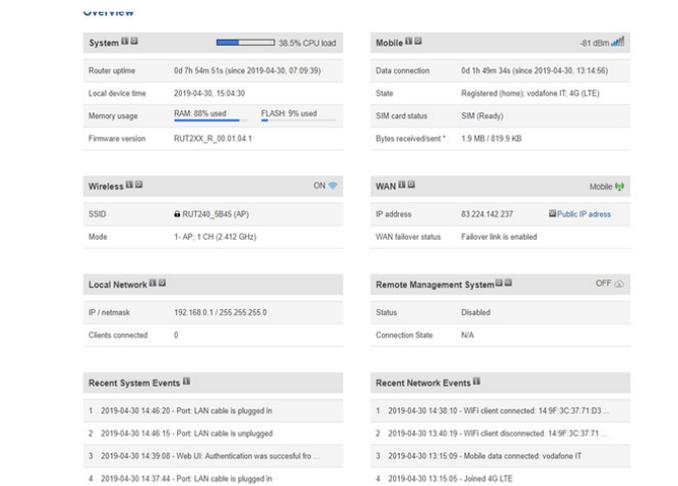
12. Select **"Network - LAN"** to enter the screen opposite:

> **LAN Configuration:**
> **IP ADDRESS: 192.168.0.1**
> **IP NETMASK: 255.255.255.0**
> **DHCP: Anable**

13. Once the page has been completed, save by clicking on **"Save"**.

14. Select **"Network - Mobile"** to enter the screen below.

> **APN Configuration:**
> **Connection type: QMI**
> **Mode: NAT**
> **APN: M2Mbis.vodafone.it (if is Vodafone)**

15. Once you have completed the page, save it by clicking on **"Save"**.

16. Select **"Network - Firewall"** to enter the screen opposite:

> **Firewall settings:**
> **Drop invalid package: unchecked**
> **Input: Accept**
> **Exit: Accept**
> **Forward: Reject**
> **DMZ configuration:**
> **Enable: Unchecked**

17. Select **"Port forwarding rules"**.
to configure the Input/Output ports.

18. Open port 80, 21, 20 by clicking name under the "**New Port Forward Rule**" menu.

Configure the ports :

Name	Protocol	External port	Internal IP	Internal port
Port80	Tcp/udp	80	192.168.0.30	80
Port20	Tcp/udp	20	192.168.0.30	20
Port21	Tcp/udp	21	192.168.0.30	21

Once the fields in the table for each port have been filled in, enable them using the **"Add"** command.
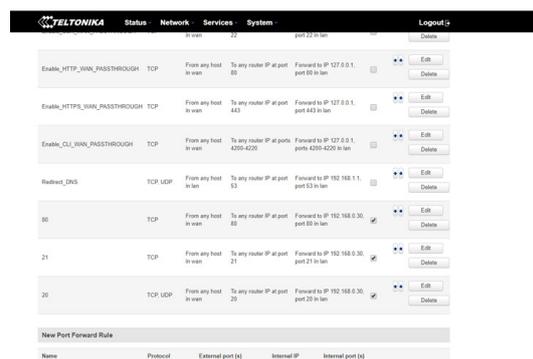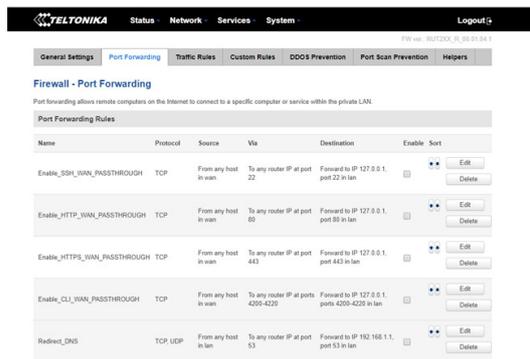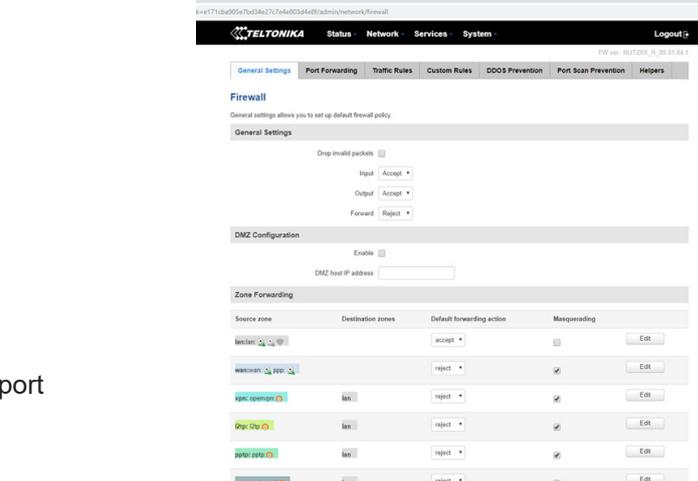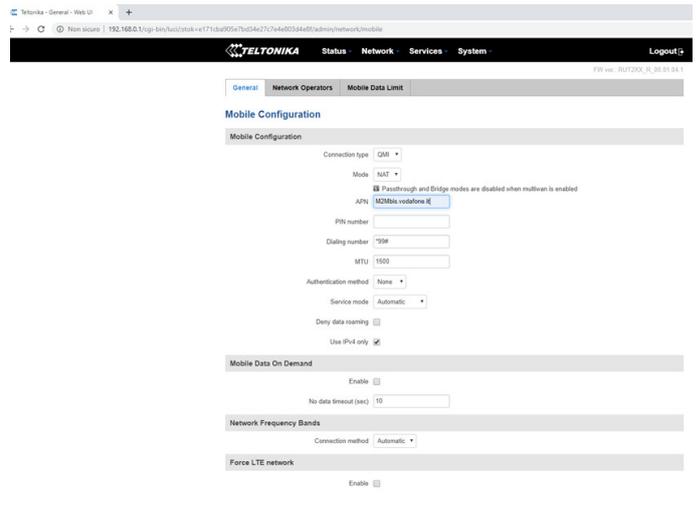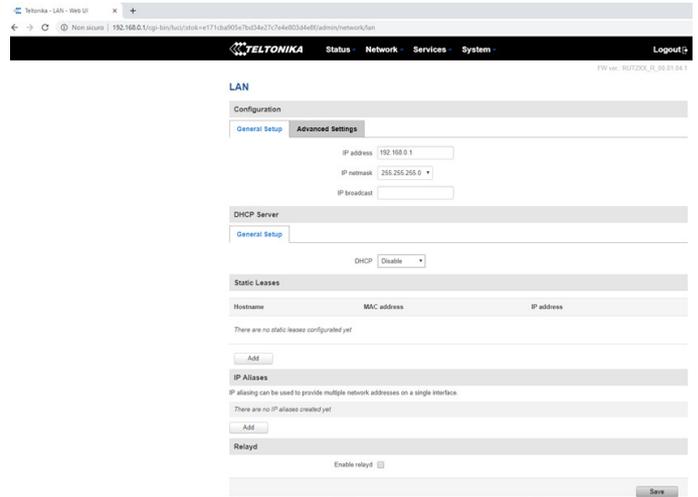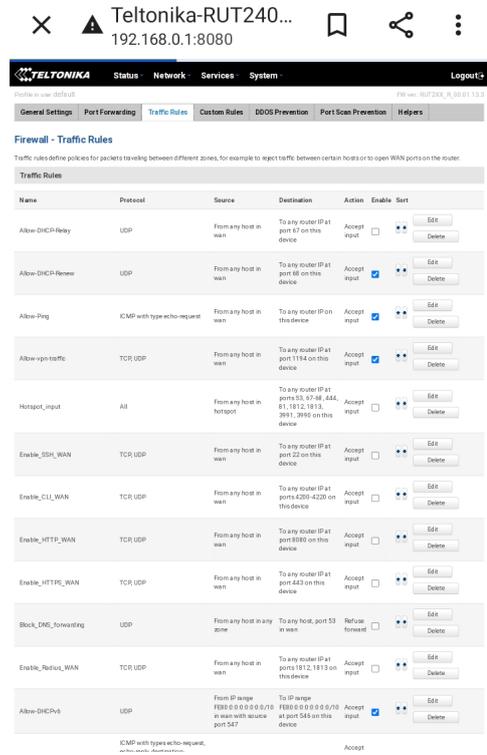
18/a. To connect remotely to the router using the PUBLIC IP generated by the data SIM card, perform the following procedure:

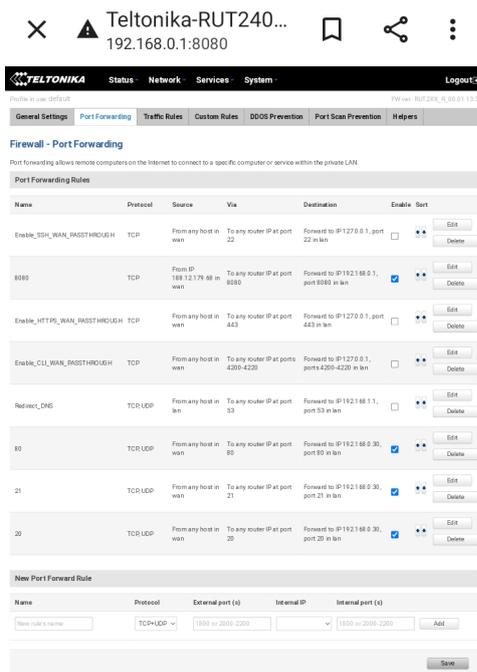**1** Select **"ACCESS CONTROL"** by following the path: SYSTEM--->ADMINISTRATION:
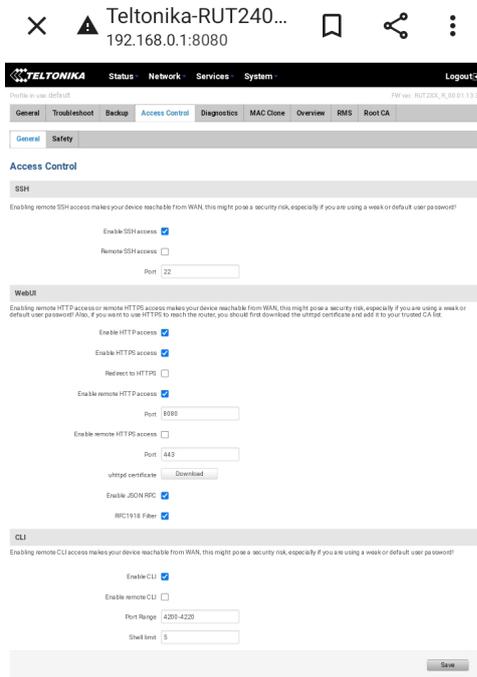
Select **"Enable Remote HTTP Access"**.
write 8080 in the PORT box and press **"SAVE"**.

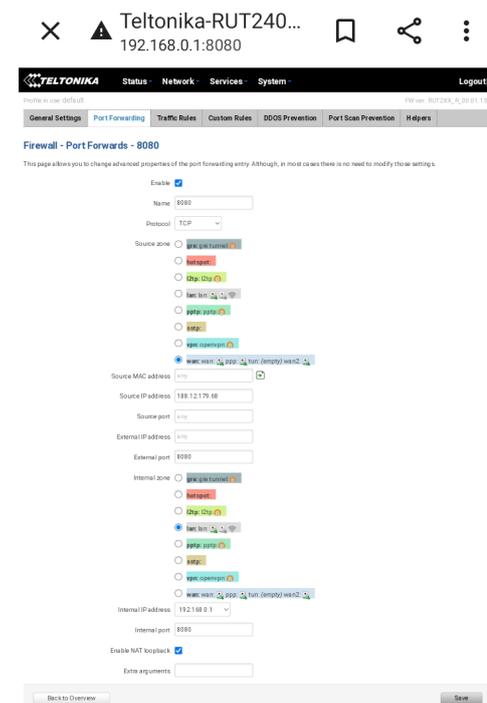---

2 Select FIREWALL TRAFFIC RULES, disable **'ENABLE_HTTP_WAN'**.

---

3 Follow the path:
Network--> Firewall - Port Forwarding
ENABLE PORT 8080

---

4 Fill in the page and press **"SAVE"**.

---

19. Once all doors have been opened, save by clicking on **"Save"**.

20. To protect the Router from external DDOS attacks, enter a public IP address of the local network on ports 80,21,20 from which PCs can access, blocking all those outside the network.

21. Set IP in the **"Source IP address"** drop-down list as in the following picture:
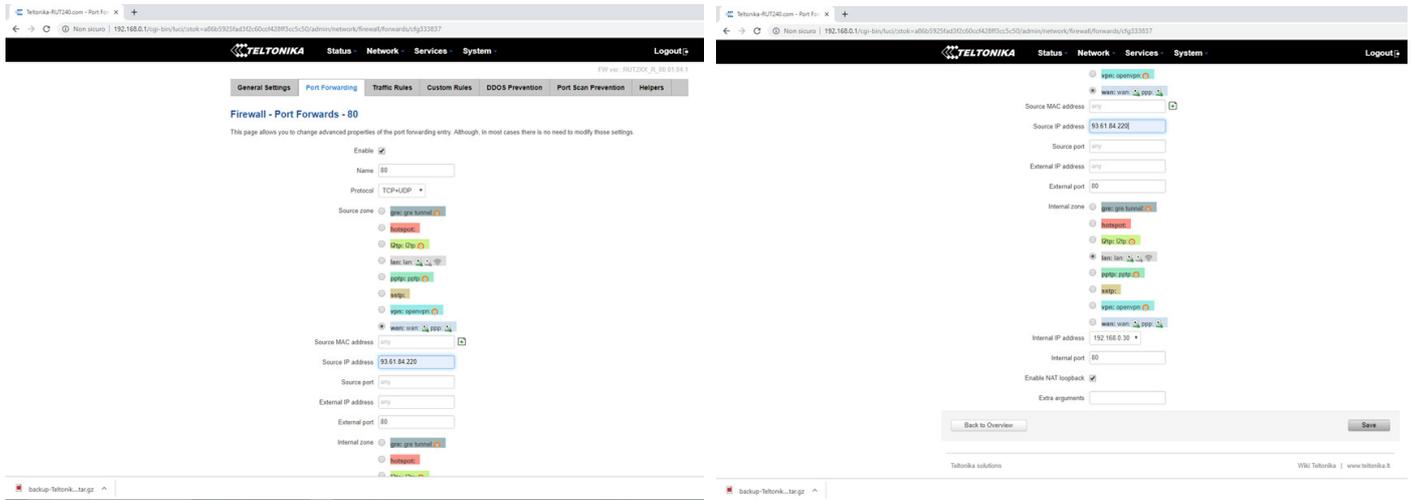
22. Once you have completed the page, save it by clicking on **"Save"**.

23. If the SIM Card has **"Public IP" NOT** enabled, G801 or G802 can only transmit data to an FTP Server.

> **G801 or G802 FTP Client --> FTP Server**

24. If SIM Card has "static public IP" enabled, G801 or G802 can send data to an FTP server and can receive remote commands.

> **G801 or G802 FTP Server <-- FTP server**
> **G801 or G802 WEB Server <-- FTP server**

25. To take advantage of all the modes listed above, the public-dynamic IP must be converted to a static IP.
  A dynamic DNS service can be used. Two of the most popular such services are listed below:

> **a)https://account.dyn.com/dns/dyndns/**
> **b) https://www.noip.com/sign-up**

26. Select **"Services - Dynamic DNS"** to enter the screen below:
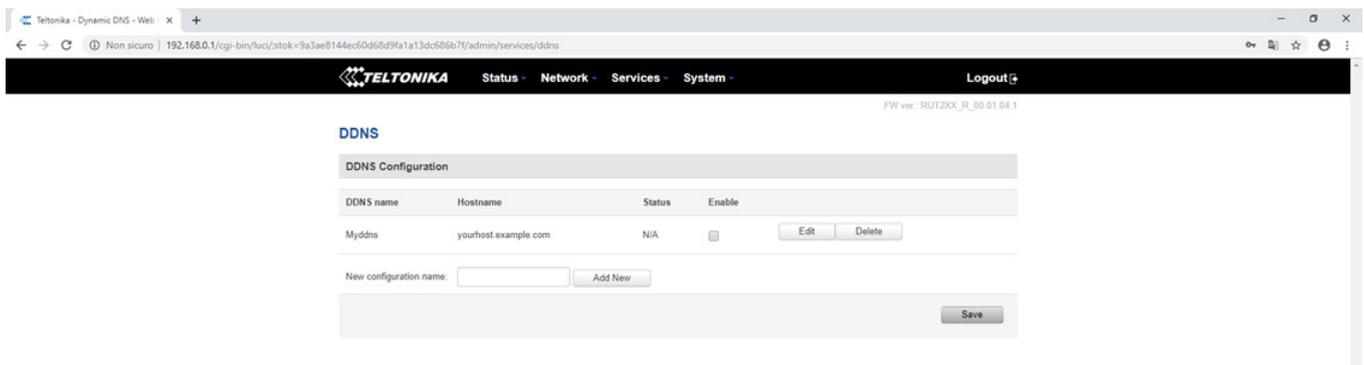
27. If you want to add the dyndns service you need to write the name and press **"Add New"** in the menu.

28. To configure the DNS see the picture below:

> **Enable:**   Tick
> **Service:**   select DYN.COM service
> **Hostname:**   name given by the Dyndns service to the control unit
> **Username:**   User of DynDNS
> **Password:**   Passw of the dyndns
> **Ip source:**   Public
> **URL to detect:**   automatically associated
> **IP renew interval:**   10
> **Force IP renew:**   72

29. Once you have completed the page, save it by clicking on **"Save"**.
30. If you want to create a direct connection bridge to the G801 or G802, use WAN3(Wi-Fi) under the menu (Network-Routing).
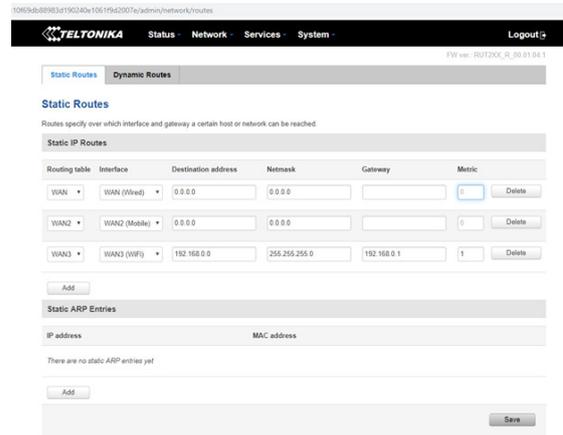
31. Once you have completed the page, save it by clicking on **"Save"**.

32. Connect to the Wi-Fi of the mod. RUT240 router via the phone by disabling DHCP, set the option STATIC, as per the example in the images below.

33. Type in the IP address: 192.168.0.30 from a Browser, you will be asked:

> **User ID: admin**
> **Password: 1234**

34. The configuration is now complete.

GEI S.r.l. (a S.U.) - Via Robert Koch 55/A
43123 Loc. Pilastrello, Parma - ITALY
Tel. +39 0521 642229

sales@geielettronica.it
www.geielettronica.it
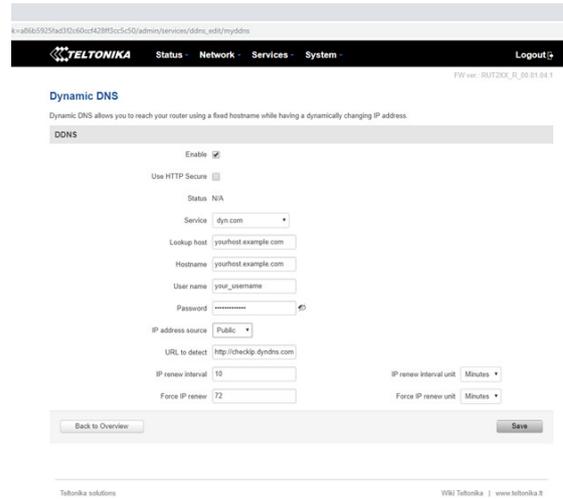
EU Declaration of Conformity

21th of September, 2021

Kaunas

Declaring Organization: TELTONIKA NETWORKS UAB

Product Name: LTE Router

Product Model Name: RUT240

Used frequency range of built-in RF module:

Band		UL f, MHz	DL f, MHz
GSM	GSM900	880-915	925-960
	GSM1800	1710-1785	1805-1880
WCDMA	1	1920-1980	2110-2170
	8	880-915	925-960
LTE	1	1920-1980	2110-2170
	3	1710-1785	1805-1880
	7	2500-2570	2620-2690
	8	880-915	925-960
	20	832-862	791-821
	28A	703-733	758-788
Wi-Fi 2.4GHz	1-13	2401-2483	

Transmit Power:

- Wi-Fi 2.4GHz: 12.6 dBm (EIRP)

- Max. 32.33 dBm (GSM1800)

- Max. 23.63 dBm (WCDMA B8)

- Max. 23.8 dBm (LTE B7)

DNV·GL ISO 9001
DNV·GL ISO 14001
DNV·GL ISO 45001

TELTONIKA NETWORKS UAB, hereby declare under our sole responsibility that the above-described product is in conformity with the relevant Community harmonization: European Directive 2014/53/EU (RED).

The conformity with the essential requirements has been demonstrated against the following harmonized standards:

Harmonized standard reference	Article of Directive 2014/53/EU	Test report No.
IEC 62368-1:2018 EN 62368-1:2014+A11:2017 EN 50385:2017 EN 62232:2017	Health and safety – Article 3.1(a)	R1910A0619-L1 R1910A0619-M1
EN 55032:2015 EN 55035:2017 ETSI EN 301 489-1 V2.2.3 Draft ETSI EN 301 489-17 V3.2.0 Draft ETSI EN 301 489-52 V1.1.0	Electromagnetic compatibility – Article 3.1(b)	R1910A0619-E1V1
ETSI EN 301 511 V12.5.1 ETSI EN 301 908-1 V13.1.1 ETSI EN 301 908-2 V13.1.1 ETSI EN 301 908-13 V13.1.1 ETSI EN 300 328 V2.2.2	Efficient use of radio spectrum – Article 3.2	R1910A0619-R1 / R1805A0247-R1 R2101A0072-R2 R2101A0072-R3 SZCR210402067702

The conformity assessment procedure referred to in Article 17 and detailed in Annex III of Directive 2014/53/EU has been followed with the involvement of the following Notified Body: Timco Engineering, Inc., 849 N.W. State Road 45, Newberry, Florida 32669, United States. Notified Body No.: 1177.

Therefore $C\epsilon$ is placed on the product.

EU Type Examination Certificate No. **TCF-3357CC19**

Head of Testing Division

Eligijus Gružauskas

EU RoHS Declaration of Conformity

13th of August, 2021

Kaunas

This EU RoHS Declaration of Conformity is issued under the sole responsibility of the manufacturer.

The objects of the declaration described below are in conformity with Directive 2011/65/EU and amendment 2015/863/EU (RoHS 3) of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Models listed in **Table 1** do not contain any substances above the maximum concentration limits of 0.01% for Cd and 0.1% for Pb, Hg, Cr (VI), PBB, PBDE, DEHP, BBP, DBP, DIBP as appointed in the Annex II of 2015/863/EU, except those application(s) listed in **Table 2** which are exempted by the Annex III of Directive 2011/65/EU listed in:

- exemption for lead (Pb) subject to 2011/65/EU Annex III:
  (6c) copper alloy containing up to 4% lead by weight.

Table 1. List of products without any exemptions.

Category	Device
Router	RUT300
	RUT850
	RUTX08
Switch	TSW100
	TSW110

DNV·GL
ISO 9001

DNV·GL
ISO 14001

DNV·GL
ISO 45001

Table 2. List of products with applied exemption.

Category	Device	Exemption for lead (Pb) subject to 2011/65/EU Annex III
Modem	TRM240 TRM250	Yes
Gateway	TRB140 TRB141 TRB142 TRB145 TRB245 TRB255	Yes
Router	RUT230 RUT240 RUT360 RUT900 RUT950 RUT955 RUTX09 RUTX10 RUTX11 RUTX12 RUTX14 RUTXR1	Yes

Signed for and on behalf of TELTONIKA NETWORKS UAB Management representatives:

Head of Technical Support Department   Vilmantas Simpukas