

ICX-T245LTE-CAT4-XX* and ICX-T255LTE-NBM1

Getting Started

V 1.1

1. Outlook





Note:

Figure above is showing Mobile network signals, supported by ICX-T255LTE-NBM1 – 2G, NB, M1. In ICX-T245LTE-CAT4-XX supported signals, as stated on unit back panel are 2G, 3G and 4G.

Important:

Reset button can be used only by RealiteQ authorized personnel!!!



16 PIN CONNECTOR PINOUT



Fig 3 16 pin connector

* XX=EU, US, LA, CN

2. Hardware installation (see Fig. 4 and Fig. 5)

- 1. Unscrew two back panel hex bolts and remove the back panel.
- 2. Insert your SIM card(s) into the SIM socket(s), which are located on the bottom side of PCB.
- 3. Attach the panel and tighten the hex bolts.
- 4. Attach the mobile antenna (max torque 0.4 N·m / 3.5

+ - 9-30 VDC positive power pin

D1, D2, D3 - Configurable digital Input/Output pins. Open collector output, max output 30 V, 300 mA or Digital input, where 0-6 V detected as logic low and 8-30 V – logic high.

CTS - RS232 clear data to send pin (output).

- RTS RS232 request data to send pin (input).
- R+ RS485 receiver positive signal pin.
- **D+** RS485 driver positive signal pin.
- - Negative/ground power pin.
- Ground pins for D1, D2, D3, A, RS232 and RS485.
- A Analog input pin. Analog voltage range 0-30 V.
- TX RS232 transmitted data (input).
- RX RS232 received data (output).
- R- RS485 receiver negative signal.
- D- RS485 driver negative signal.

- 5. Connect 9-30V DC power to 16 pin terminal block:
 - a) red wire to top row first contact (+).
 - b) black wire to bottom row first contact (-).
- 6. Connect the 16-pin terminal block to gateway 16 pin connector and plug other end of the power





Fug. 4 Insert SIM card (s)

Fig. 5 Connecting 9-30V DC power

Notes:

- ICX-T255LTE-NBM1 is running with RealiteQ <u>only</u> with SIMs, supporting cellular standard LTE <u>Cat</u> <u>M1</u>. Please be sure to insert only SIM cards, supporting this standard.
- In places with week and unstable cellular signal it's recommended to insert two SIM cards from different providers to obtain redundancy and as result better connection.



3. Installing compact DIN rail kit

To install DIN rail kit to any track of iCex:

- a. Select track in iCex, which will provide best installation of iCex in your cabinet
- b. Move the kit to the track in iCex as shown in the Fig. 7.
- c. Use screwdriver **Philips 2 x 100** to screw both inserted in the kit screws.





Fig. 6 DIN rail mount kit

Fig. 7 DIN rail kit mounting

4. Device configuration

- a. Insert SIM cards as shown in figure 4. Default trey is bottom (tray 1)
- b. Power on the device and connect the Ethernet cable to your computer.
- c. Allow the gateway to boot up. This might take some time. At the end mobile signal strength LEDs will stop blinking and will show actual signal strength.
- d. Set manually IP of your computer to 192.168.16.200.
- e. To enter the gateway Web interface type unit's IP:**192.168.16.202** into the URL field of your browser. This will open unit's user interface.

Login	Main Driver - 1	Driver - 2	Driver - 3	Status	Files	Trace
	Login					
User name						
Password						
	Login					
	Change login detail					

Fig. 8 Login Tab of iCex UI

f. Log in with username **iCEX** and password **iCEX**. Username and password are case sensitive.

Note: Login expires after 30 minutes or after restart iCex. You will be prompted to re-login.



Realite	Q ™						Login OK	Comm. OK
Login	Main Driver - 1 Driver -	2	Driver - 3	Files Trace	e			
Read	Setting Save to INI file Apply			Monitor & Control				
Device		Т	Control					
Path			Restart	Apply				- T
Name	trb255		Reboot	Apply				
URL	ui.realiteq.net		Software version					
Access-Token	b1ba2f9bab8f4ce0af4bbd511e236651		Version	5.0.0.7				
Network IP address	S		Device clock					
DHCP	No		Date/Time	25/07/2021 08:15:54				
IP address	192.168.16.152		Communication to	server				
Network Mask	255.255.255.0	1	Status	OK				
Gataway address	3	-	Drivers status					
Dateway address	:		Driver 1	OK		- 1		
DNS address	?		Driver 2	OK				
	Set IP		Driver 3	Not active				
		-	Poutor status					

Fig. 9 iCex UI – Configuration (Main) tab

- g. After successful connection and login the relevant signs in upper right corner of display change to green. User interface switched automatically to **Main** tab (Fig 9). You are entering the **Configuration UI** and set relevant parameters.
- h. When you set/change parameters within specific tab of Configuration UI, button Apply (1), (Fig. 10) changes to red. Apply on it before leaving the tab to save settings.

Login N	Main Driver - 1 Driver - 2		Driver - 3	Status	Files	\square	Trace
Read Setting Save to INI file Apply			Мо				
Device		1	Control				
Path			Restart	Apply -	3		
Name	trb255		Reboot	Apply			
URL	realitest.realiteq.net		Software version				
Access-Token	5702c8df74fa43ac86e08b7def677731		Version				
MCP + SSL Protocol			Device clock	I			
Watchdog active			Date/Time	2022/02/13 14	:22:37		

Fig.10 Apply changes, Save on INI file and Restart iCex

RealiteQ[®]

i. After finishing **all** settings apply on **Save to Init file (2)** to save changes in iCex flash memory. Then apply on **Restart (3)** your changes to take place. See Fig 10: point 3.

j. Check current status of iCex, , GPS position (in case GPS enabled) and built in I/O in **Status** tab. See Fig 11, point (1).

h. Select function of embedded digital I/O – as Input or as Output (fig. 11; point 2



Login	Main	Driver - 1	Driver - 2	Driver - 3	Status	Files	Tra
Read	Setting	Save to	INI file Apply	M	onitor & Contro	1	
Device				Router status			
DIO 0 type	Dutput 🗸			Connect state	Connected		
DIO 1 type	nput 🗸	- 2		Network state	registered (ho	me)	
DIO 2 type	nput 🗸			Byte sent	391392		
				Byte recive	223690		
				Connet type	CAT-M1		
				Signal (DB)	-51		
				Operator name	HOT mobile		
				Operator no.	42507		
				SIM State	inserted		
				SIM number	89972071041	84525467F	
				IMEI	86703504990	2727	
				Modem temperature	450		
				GPS			
				Latitude	0.000000		
				longitude	0.000000		
				Altitude	0.000000		
				Speed	0.000000		
				I/O Status			
				DIO 0	Off		
				DIO 1	Off		
				DIO 2	Off		
				Analog	267		

Fig. 11 Status tab