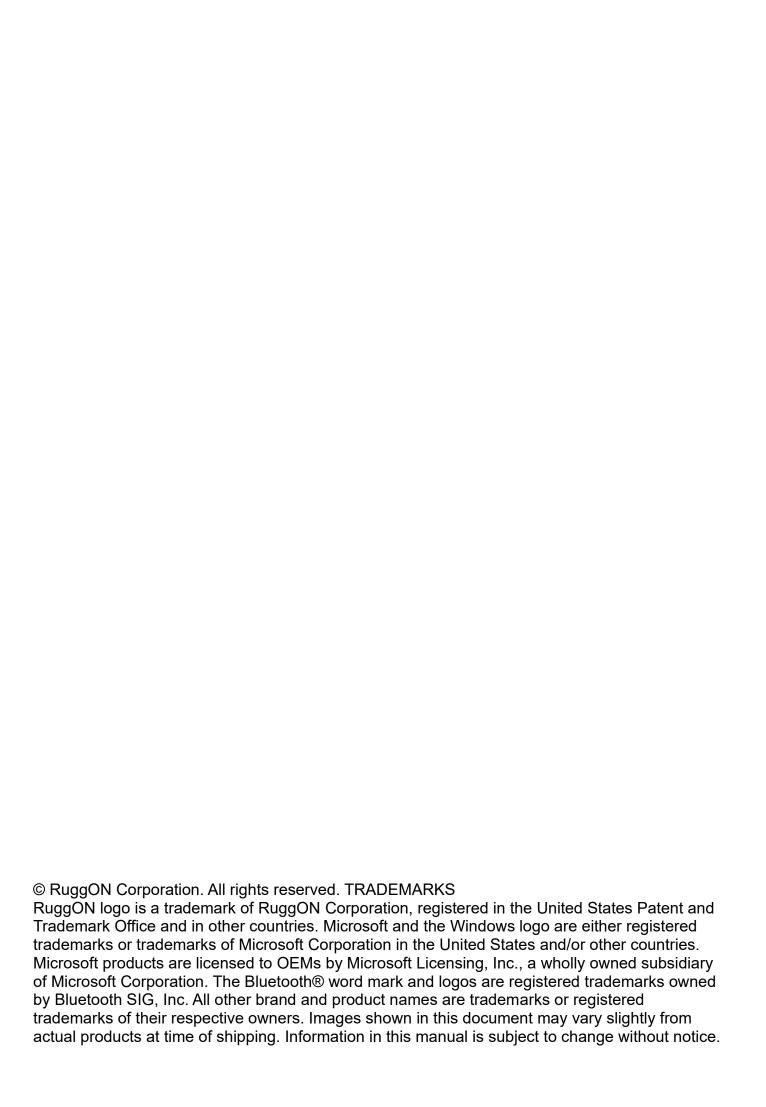
# LR10S User's Manual



# About This Manual

The LR10S User's Manual provides instructions for qualified personnel to follow when setting up a new LR10S device.

This document is intended for use by qualified personnel to compliment the training and expertise, not to replace it.

### Related Information

Current information and manuals are available for download at the following website:

https://pc.logitec.co.jp/products/

#### Conventions

Bolded or underlined text is used to emphasize the designated information.



A Note is used to provide additional information for the device or settings.



A Caution is used to warn against potential hazards or to caution against unsafe practices.



A Warning is used to identify immediate hazards for property damage, injury or death.

# Basic Safety Guidelines

The following safety guidelines are intended to help protect the user from injury and prevent damage to the hardware.

- Do not place anything on the AC adapters power cable and make sure the cable is not located where it can be tripped over or stepped on.
- Do not cover the AC adaptor as it reduces the cooling.
- Do not use the AC adapter while it is inside the carrying case.
- Use only the AC adapter, power cord, and batteries that are approved for use with the device.
   Use of another type of battery or AC adapter may cause risk of fire or explosion.
- If you use an extension cable with the AC adapter, ensure that the total ampere rating of all products plugged in to the extension cable does not exceed the ampere rating of the extension cable.
- If the device is moved between environments with very different temperature and/ or humidity ranges, condensation may form on or within the device. Avoid damaging the device by allowing sufficient time for the moisture to evaporate before using the device.
- When disconnecting cables, pull on the connector or on its strain relief loop, not on the cable itself. When pulling out or plugging in the connector, keep it evenly aligned to prevent bending the connector pins.

#### Intended Use

Read the safety guidelines thoroughly before starting any servicing on the device. Read the guidelines before powering up the device, and keep this document for later use. The operator is solely responsible for any damage resulting from unauthorized modifications to the device.

#### **Unintended Application Use**

The device is not designed for use in life-support systems or critical safety/security systems where system malfunction can lead to the direct or indirect endangerment of human life. The operator is fully responsible for using the device in these situations.

# Maintenance and Operation Overview

The LR10S is designed and manufactured according to strict controls and following the stated safety regulations. The following list identifies incorrect operating uses of the LR10S. Incorrect use of the LR10S can lead to hardware damage, safety issues and possible risk to personnel health:

- The LR10S is under operation by untrained personnel;
- The LR10S is not maintained as recommended;
- The LR10S is not used as intended.

# Safety

To prevent injury and damage, read the following safety guidelines prior to operating the device. The manufacturer assumes no liability for any and all damages arising from misuse or noncompliance with these guidelines.

The adapter shall be installed near the equipment and shall be easily accessible.

#### CAUTION

Risk of explosion if battery is replaced by an incorrect type.

Dispose of used batteries according to the instructions.

#### **Electrical Hazards**

#### Cleaning/Servicing: Power Off the LR10S

Disconnect the LR10S from power before cleaning or servicing it.

#### Power Adapter

Contact an authorized service personnel for repairs to the power pack. In the event of a blown fuse after replacing the fuse, contact an authorized service personnel to avoid electrical shock.

#### **Use only Supplied Power Cables**

Ruggon/Ubiqconn power cables meet industrial requirements for low-temperature flexibility, UV resistance, and oil resistance. Use only supplied power cables from Ruggon/Ubiqconn.

If other power cables are used, the following may apply:

- The operator is solely responsible for the resulting damage;
- All Ruggon/Ubiqconn warranties are void.

#### Environmental Hazards

Do not use the LR10S in locations near/with flammable gases or vapor. The use of electrical equipment in explosive environments can be dangerous.

■ Turn off the device when near a gas station, fuel depot, chemical plant or a place where blasting operations take place.

#### Environmental

### Ambient Temperature

The LR10S operates on the basis of a passive cooling concept which internal waste heat is released via the housing surface and requires fresh airflow in the environment.

- Operating the LR10S with no fresh cooling air may cause overheating and damage to the device.
- The operating environment should not be enclosed to prevent the cool air being heated by the heat waste from the device.

#### Connecting and Disconnecting External Devices

To prevent the considerable damage, the LR10S and the external device should be disconnected from power when connecting/disconnecting excluding USB devices.

#### Only Use Authorized Accessories

Only use the supplied cables, power packs and other accessories that have been tested and approved by Ruggon/Ubiqconn. Contact your local distributor for further information.

#### Radio Transmissions

#### Permitted Transmission Power

Follow the national regulations for the maximum permitted transmission power.

The operator is solely responsible for this type of operation.

#### Radio Frequency Limited Locations

Considering the radio frequency limitation in hospitals and aircraft, the LR10S can only be installed with permission.

Industrial computers may affect the function of implanted medical devices such as pacemakers and may cause malfunction.

# Cleaning and Servicing

- Disconnect the LR10S from power before cleaning or servicing.
- Never clean the LR10S with compressed air, a pressure washer or a vacuum cleaner.
- If necessary, clean the housing of the LR10S with a damp cloth.
- Clean the touch-screen with a nonabrasive cloth.

# Regulatory and Certification



#### contain FCC ID: 2ABTU- AX210D2

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.



Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This device is slave equipment; the device is not radar detection and not ad-hoc operation in the DFS band.

Prohibited for control of or communications with unmanned aircraft systems.

### Labeling Requirements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

#### RF Exposure warning

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is **1.6 W/kg**. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of <a href="https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm">https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm</a> after searching on FCC ID: 2ABTU-AX210D2.

# CE CE

BE	BG	CZ	DK	DE	EE	IE
EL	ES	FR	HR	IT	CY	LV
LT	LU	HU	MT	NL	AT	PL
PT	RO	SI	SK	FI	SE	

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. Please contact your local representative for ordering information.

This product has passed the CE test for environmental specifications. Test conditions for passing included the equipment being operated within an industrial enclosure. In order to protect the product from being damaged by ESD (Electrostatic Discharge) and EMI leakage, we strongly recommend the use of CE-compliant industrial enclosure products.

Hereby, Ubiqconn Technology Inc. declares that the radio equipment type LR10S is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: https://www.ubigconn.com/en/

According to ISO / IEC Guide 22 and EN 450 14 Manufacturer's Name: Ubiqconn Technology Inc.

Manufacturer's Address: 4F, No. 300, Yang Guang St., NeiHu. Taipei, Taiwan, 11491

Declares, under our sole responsibility, that

Product Name: Rugged Tablet

Model Number: LR10S

Conforms to the following Product Specifications:

RED 2014/53/EU , LVD 2014/35/EU , EMC 2014/30/EU

- ETSI EN 300 328

- ETSI EN 300 440

- ETSI EN 300 893

- ETSI EN 303 687

- ETSI EN 301 489-1

- ETSI EN 301 489-17

- ETSI EN 301 489-19

- EN 301 413

- EN 55032: 2015/A1:2020

- EN 55035: 2017/A11:2020

EN IETC 61000-3-2:2019/A1:2021

- EN 61000-3-3:2013/A2:2021

- EN 62368-1:2020+A11:2020

- EN 50566

- EN IEC 62311

- EN 62209-2

- EN 62479

- EN 50663

- EN 50665

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

This device is intended for indoor use only when operating in the frequency range 5945 to 6425 MHz which is applicable in countries that support WiFi 6E.

This device meets the EU requirements (2014/53/EU) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

The limits are part of extensive recommendations for the protection of the general public. These recommendations have been developed and checked by independent scientific organizations through regular and thorough evaluations of scientific studies. The unit of measurement for the European Council's recommended limit for mobile devices is the "Specific Absorption Rate" (SAR), and the SAR limit is **2.0 W/Kg** averaged over 10 grams of body tissue. It meets the requirements of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

For next-to-body operation, this device has been tested and meets the ICNRP exposure guidelines and the European Standard EN 50566 and EN 62209-2. SAR is measured with the device directly contacted to the body while transmitting at the highest certified output power level in all frequency bands of the mobile device.

evice.											
2.40	2.4GHz Maximum Conducted Power NTNV										
	NTNV										
СН.	802.11b Freq.(MHz)	Setting	Avg (dBm)	EIRP (dBm)							
1	2412	14.75	15.81	16.70							
7	2442	15.25	15.91	16.80							

13	2472	15.5	15.96	16.85
СН.	802.11g Freq.(MHz)	Setting	Avg (dBm)	EIRP (dBm)
1	2412	16	16.43	17.32
7	2442	16.5	16.45	17.34
13	2472	16.75	16.56	17.45

	NTNV									
СН.	802.11a Freq.(MHz)	Setting	Avg (dBm)	EIRP (dBm)						
36	5180	16.5	16.38	17.30						
64	5320	16.5	16.36	17.34						
100	5500	16.5	16.22	17.18						
140	5700	16.5	16.34	17.30						
149	5745	8.25	8.42	9.37						
161	5785	8.25	8.38	9.33						
173	5865	3.25	3.40	4.35						

# 2.4GHz Maximum Conducted Power NTNV

### MIMO

	WIIWO									
СН.	802.11n20 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)				
1	2412	A	13.25	13.46	16.38	17.27				
1	2412	В	13.23	13.28	10.36	17.27				
7	2442	A	13.5	13.38	16.31	17.20				
/	2 <del>44</del> 2	В	15.5	13.22	10.51	17.20				
12	2472	A	13.75	13.42	16.35	17.24				
13	2472	В	13.75	13.25	10.33					
СН.	802.11n40 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)				
3	2422	A	12.75	13.38	16.26	17.15				
3	2422	В	12.73	13.11	10.20	17.13				
7	2442	A	12.75	13.32	16.19	17.08				
/	<i>2</i> 442	В	12.73	13.04	10.17	17.00				
11	2462	A	12.75	13.37	16.23	17.12				
11	2402	В	12.73	13.06	10.23	1/.12				
CH.		Chain	Setting							

	802.11ax20 Freq.(MHz)			Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)	
1	2412	A	13.25	13.58	16.46	17.35	
1	2412	В	13.23	13.31	10.40	17.55	
7	2442	A	13.5	13.56	16.50	17 20	
/	2442	В	15.5	13.42	10.30	17.39	
13	2472	A	13.75	13.41	16.35	17.24	
13	2412	В	13./3	13.26	10.55		
СН.	802.11ax40 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)	
3	2422	A	13.25	13.48	16.43	17.32	
3	2422	В	13.23	13.36	10.43	17.52	
7	2442	A	13.25	13.42	16.38	17.27	
/	∠ <del>44</del> ∠	В	13.23	13.32	10.36	1/.4/	
11	2462	A	13.25	13.47	16.36	17.25	
11	2402	В	13.23	13.22	10.30	17.43	

	5GHz Maximum Conducted Power NTNV										
	MIMO										
СН.	802.11n20 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)					
36	5180	A	13.25	13.65	16.62	17.54					
30	3100	В	13.23	13.56	10.02	17.54					
64	5320	A	13.5	13.7	16.67	17.65					
04	3320	В	13.3	13.61	10.07	17.03					
100	5500	A	13.5	13.78	16.76	17.72					
100	3300	В	13.3	13.72	10.70						
140	5700	A	13.75	13.87	16.83	17.79					
140	3700	В	13.73	13.77							
149	5745	A	5.25	5.47	8.47	9.42					
147	3743	В	3.23	5.44	0.47	7.42					
161	5805	A	5	5.25	8.22	9.17					
101		В		5.16	0.22	,,,,					
173	5865	A	1	1.21	4.18	5.13					
1,0	2002	В	_	1.12		0.120					
СН.	802.11n40 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)					
38	5190	A	13.25	14.41	17.36	18.28					
30	3190	В	13.23	14.28	17.30	10.20					

		A		14.46		
62	5310	В	13.5	14.22	17.35	18.33
100	5510	A	10.5	14.25	17.05	10.21
102	5510	В	13.5	14.22	17.25	18.21
124	5.670	A	12.5	14.33	17.07	10.22
134	5670	В	13.5	14.19	17.27	18.23
151	5755	A	4.5	5.45	0.45	0.40
131	5755	В	4.5	5.43	8.45	9.40
167	5865	A	4.75	5.26	8.21	9.16
107	3803	В	4.73	5.13	0.21	9.10
СН.	802.11ac80 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
42	5210	A	13.75	14.36	17.33	18.25
-12	3210	В	13.75	14.28	17.33	10.25
58	5290	A B	13.75	14.45 14.13	17.30	18.28
		A		14.13		
106	5530	В	14	14.41	17.44	18.40
122	5610	A	14	14.52	17.52	18.48
122	3010	В	14	14.49	17.32	16.46
155	5775	A	4.5	5.25	8.24	9.19
СН.	802.11ac160 Freq.(MHz)	B	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
50	5250	A B	13	14.33 14.14	17.25	18.23
114	5570	A B	13.25	14.34 14.31	17.34	18.30
СН.	802.11ax20 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
36	5180	A B	13.5	14.07 13.88	16.99	17.91
64	5320	A B	13.5	13.93 13.72	16.84	17.82
100	5500	A B	13.5	13.92 13.83	16.89	17.85
140	5700	A B	13.5	13.82 13.66	16.75	17.71
149	5745	A B	5.25	5.4 5.34	8.38	9.33
161	5805	A B	5	5.36 5.3	8.34	9.29

173	5865	A B	-0.25	0.07	3.04	3.99
СН.	802.11ax40 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
38	5190	A B	13.5	14.33 14.24	17.30	18.22
62	5310	A B	13.75	14.41 14.26	17.35	18.33
102	5510	A B	13.75	14.41 14.32	17.38	18.34
134	5670	A B	13.75	14.37 14.29	17.34	18.30
151	5755	A B	4.75	5.44 5.38	8.42	9.37
167	5865	A B	5	5.39 5.32	8.37	9.32
СН.	802.11ax80 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
42	5210	A B	13.75	14.28 14.13	17.22	18.14
58	5290	A B	14.25	14.53 14.44	17.50	18.48
106	5530	A B	14.25	14.42 14.35	17.40	18.36
122	5610	A B	14.25	14.48 14.43	17.47	18.43
155	5775	A B	5.25	5.43 5.33	8.39	9.34
СН.	802.11ax160 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
50	5250	A B	13.25	14.34 14.24	17.30	18.28
114	5570	A B	13.5	14.42 14.37	17.41	18.37

	6 GHz Maximum Conducted Power NTNV								
	MIMO								
СН.	802.11ax20 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)			
1	5955	A	14	14.35	17.35	18.32			

		В		14.33		
02	6415	A	14	14.37	17.24	10.21
93	0413	В	14	14.28	17.34	18.31
СН.	802.11ax40 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
3	5965	A	13.5	14.22	17.20	18.17
3	3903	В	13.3	14.16	17.20	10.17
91	6405	A	14	14.47	17.42	18.39
91	0403	В	14	14.34	17.42	10.39
СН.	802.11ax80 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
7	5985	A	14	14.26	17.24	18.21
/	3903	В	14	14.19	17.24	10.21
87	6385	A	14	14.37	17.28	18.25
07	0303	В	17	14.16	17.20	10.23
СН.	802.11ax160 Freq.(MHz)	Chain	Setting	Avg (dBm)	MIMO Avg (dBm)	EIRP (dBm)
15	6025	A	13.25	14.38	17.32	18.29
13	0023	В	13.23	14.24	17.34	10.27
79	6345	A	13.25	14.26	17.22	18.19
13	0343	В	13.23	14.15	17.22	10.17

В	BT Maximum Conducted Power			
		NTNV		
СН.	BT-1M Freq.(MHz)	Setting	Avg (dBm)	EIRP (dBm)
0	2402	12/-2/0	9.53	10.42
39	2441	12/-4/0	9.58	10.47
78	2480	12/-7-0	9.55	10.44
I	Hopping	12/-4/0	9.58	10.47
СН.	BT-2M Freq.(MHz)	Setting	Avg (dBm)	EIRP (dBm)
0	2402	8/2/0	7.14	8.03
39	2441	8/1/0	7.16	8.05
78 2480		8/0/0	7.17	8.06
Hopping		8/0/0	7.17	8.06
СН.	BT-3M Freq.(MHz)	Setting	Avg (dBm)	EIRP (dBm)

0	2402	8/2/0	7.18	8.07
39	2441	8/1/0	7.22	8.11
78	2480	8/0/0	7.20	8.09
Hopping		8/1/0	7.22	8.11

B	<b>BLE Maximum Conducted Power</b>			
СН.	BLE-1M Freq.(MHz)	Setting	Avg (dBm)	EIRP (dBm)
0	2402	-1	6.08	6.97
20	2442	0	5.94	6.83
39	2480	0	6.05	6.94

# Chapter 1. Introduction

The LR10S is a semi-rugged device equipped with 802.11, Bluetooth and GNSS for wireless data communications.

The LR10S is a semi-rugged 10.1" tablet computer capable of 800 x 1280 resolution.

# **About This Guide**

The LR10S User Manual provides instruction for qualified personnel to use as a guide for setup of the device. This document is not intended to replace the training and expertise of the end-user.

# Unpacking the Device

Before you begin the installation or configuration process make sure to inspect all components and accessories. Contact your representative if there are any missing or damaged items. See "Contacting Ruggon/Ubiqconn" on page 19.

#### Parts List

The LR10S is shipped with the following items. All other accessories are sold and ordered separately. For help, contact your local Ruggon/Ubiqconn sales representative. See "Contacting Ruggon/Ubiqconn" on page 19.



LR10S

TBD

# Identifying the Device

#### Overview

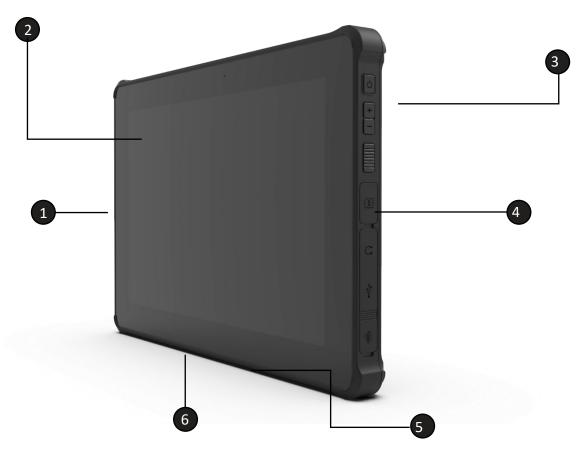


Figure 1. Overview

Table 1. Overview

No	Item	Description
1	Left view	
2	Front view	See "Front View" on page 10 for further information.
3	Rear view	See "Rear View" on page 12 for further information.
4	Right view	See "Side View" on page 11 for further information.
5	Rubber bumpers	Easy to grip rubber bumpers enable the semi-rugged tablet to
		withstand shocks and drop for use in demanding environment.
6	Bottom View	See "Bottom View" on page 11 for further information.



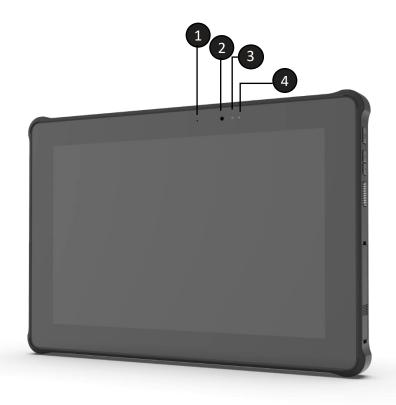


Figure 2. Front View

Table 2. Front View

No	Item	Description	
1	Microphone Hole	Digital Microphone	
2	Light Sensor	Ambient Light sensor	
3	Battery LED	Display battery status, see "LED Status" on page 10.	
4	Power LED	Display battery status, see "LED Status" on page 10.	

#### LED Status

Table 3. LED Status

Item	Item	Description	
	Green: On	Tablet Power ON	
Power	Green Blinking	Sleep	
	Off	Tablet Power OFF	
	Green: On	Fully Charge	
	Red On	Charging	
Battery	Red Blinking	Battery Capacity less than 10%	
	Off	Not Charging	

#### **Bottom View**



Figure 3. Bottom View

Table 4. Bottom View

No	ltem	Description	
1	Tripod Hole	Connect to Tripod	

#### Side View

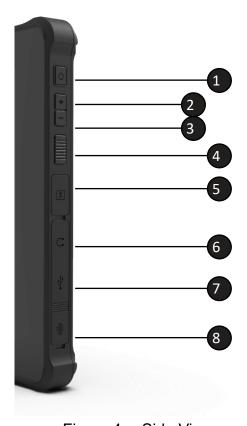


Figure 4. Side View

Table 5. Side View

No	Item	Description	
1	Power Button	Turns the LR10S on or off.	
		(Long pressing over 10 seconds for force shutdown)	
2	Volume + Button	Volume increase.	

3	Volume - Button	Volume decrease.	
4	Function Button	Programmable function Button.	
5	SD card slot	Insert SD card to storage data.	
6	Audio jack	Connect a 3.5mm jack for a headphone or external speakers.	
7	USB 3.1	Connect USB devices to the LR10S	
8	USB 3.1 Type C	Connect USB devices to the LR10S, or Insert Power connector	
		to charge battery.	

### Rear View



Figure 5. Rear View

Table 6. Rear View

No	ltem	Description	
1	Speaker	Embedded speaker.	
2	Service Door	Remove the cover to find the expansion SSD	
3	Rear camera	12 mega-Pixels camera	
4	Flash light	LED auxiliary light	

# Chapter 2. Getting Started

This section provides an outline of the steps necessary to setup a new LR10S. A detailed guide follows the listed items, see as follows.

For additional technical assistance, contact your Ruggon/Ubiqconn representative. See "Contacting

Ruggon/Ubiqconn" on page 19.



It is recommended to installing or remove accessories on a clean, well-lit work surface. To protect yourself and the device from electrostatic discharge, wear anti-static wrist straps or place the device on an anti-static mat.

#### First Time Use

LR10S is under "Battery Ship Mode" and will not power on to preserve the battery and prevent power loss. To enable "Regular Mode" and activate the battery, please connect the AC adapter to power on.

Please always use AC adapter included in the package. If user wants to use other Type C PD adapter, please make sure that adapter can provide no more power than 65 watts

# Charging the Battery

When you use the AC adapter to connect your LR10S to a power outlet, the standard battery will automatically begin to recharge.

While the battery is charging, the power LED will be active. When the battery is fully charged, the power LED is lit a solid green.

- 1. Flip open the USB-C cover to expose the USB-C jack.
- 2. Connect the AC adapter to the USB Type C port.

After charging the battery, disconnect the AC adapter and close the USB-C cover.

- 1. Angle the cover to seat it in place.
- 2. Push in the cover to seal the USB-C compartment.

Powering the Device On and Off

Powering On the Device

Only power on the LR10S after connecting all of the peripherals and cabling.

1. Press and hold the power button until the screen lights. The device runs through the start up sequence and powers up.

### Powering Off the Device

Start screen:

Tap () > Shut down.

- Desktop screen:
  - 1. Tap and hold at the bottom left corner of the Desktop screen.

2. Tap Shut down or sign out > Shut down.

# Removing the Protective Film from the Display

The front display of the LR10S is protected during transport by a transparent film. This film should remain on the front display during assembly to avoid damage to the front display surface. Only remove the film once all of the assembly work has been completed.

# Chapter 3. Operation

# Connecting to External Cabling



To prevent damage to the device, connect all cabling and accessories before powering up the device.

#### Connect USB Cabling

The LR10S have one USB 3.2 Type C and one USB 3.2 Type A port for connecting USB devices, such as a digital camera, scanner, printer, modem, and mouse. The USB Type A port support USB 2.0 or USB 3.0 devices.

- 1. Open the right I/O compartment cover.
- Connect to USB device via USB cable.

#### Connect Audio Cabling

For higher audio quality, you can send sound through external audio devices such as speakers, headphones, or earphone using audio connector.

- 1. Open the right I/O compartment cover.
- 2. Connect the audio cable.

# Shoulder Strap (Optional)

The LR10S can be optionally equipped with a shoulder strap for convenience and choice. Select the accessory that is right for your needs.

#### Connecting the Shoulder Strap

- 1. Make sure the D-rings are tightly secured before installing the Shoulder strap.
- 2. Connect the Shoulder strap on the D-rings

# Connecting to a Wireless Network

Before you can make use of the LR10S wireless functions, you need to connect to a network. The following is a set of procedures for connecting to a wireless network.

- 1. Before beginning, make sure your Wi-Fi setting is enabled and you are within range of a wireless network. If your Wi-Fi setting is disabled, proceed to step 2.
  - Look at the Network icon located at the right side of the taskbar. If the icon displays an X in a red circle, you are not within range of a wireless network. Move to a different spot until the Wi-Fi icon changes status indicating availability to a wireless network.
- 2. From any screen, open the Charms bar by sliding your finger inward from the screen's right edge. The Charms bar displays along the screen's right side.
- 3. In the Charms bar, tap **Settings** to open the **Settings** menu.
- 4. In **Settings**, tap the Network icon to display the Networks connection settings.
- 5. The Wi-Fi menu displays. By default, the Wi-Fi menu is set to Off. Tap the bar next to Off to toggle Wi-Fi to On. This enables the Wi-Fi option.
- 6. Once W-Fi is enabled a listing of all available wireless networks displays. The wireless networks with the strongest signal are atop the list.

- 7. Select the network you want to connect to, and tap the **Connect** button. You can tap the **Connect Automatically** check box if you connect to this network frequently. If you connect to the network, you are finished with the process. The network is considered an Open unsecured network, no password is required.
- 8. If a password is required, type the password in the **Enter the network security key** field. Alternatively, you can also push the WPS button on your router to begin the security handshake.
- 9. Tap **Next** to finish the connection process.

You have successfully connected to a wireless network.

# Chapter 4. Troubleshooting

Use the troubleshooting tables in this section to fix problems with the Wi-Fi connection, 802.1x security, or general problems with operating the computer.



If you send the computer in for service, it is your responsibility to save the computer data and configuration. Ruggon/Ubiqconn is responsible only for ensuring that the hardware matches the original configuration when repairing or replacing the computer.

#### Troubleshoot the Wi-Fi Connection

Use this troubleshooting table to help solve problems with your 802.11 radio connection.

- Q. When you turn on the computer after it was suspended for a while (10 to 15 minutes or longer), it can no longer send or receive messages over the network.
- $A_{\bullet}$  Host may have deactivated or lost current terminal emulation session. In a TCP/IP direct connect network, turn off the "Keep Alive" message from host to maintain the TCP session while the computer is suspended.
- Q. The computer is connected to the network and you move to a new site to collect data. Your computer now shows you are not connected to the network.
- $A_{ullet}$  Move closer to an access point or to a different location to reestablish communications until you reconnect with the network.
- $oldsymbol{Q}_{ullet}$  The computer appears to be connected to the network, but you cannot establish a terminal emulation session with the host computer.
- $A_{ullet}$ . There may be a problem with the host computer, or with the connection between the access point and the host computer. Check with the network administrator to make sure the host is running and allowing users to log in to the system.
- Q. The computer appears to be connected to the network, but the host computer is not receiving any information from the computer.
- $A_{ullet}$  There may be a problem with the connection between the access point and the host computer. Check with the network administrator or use your access point user's manual
- **Q.** A network connection icon appears in the toolbar, but then disappears.
- A. The computer may not be communicating with the intended access point. Make sure the network name matches the access point network name. The access point may not be communicating with the server. Ensure the access point is turned on, properly configured, and has 802.1x security enabled.

# **Troubleshoot Operating the Computer**

Use this section to troubleshoot problems that may prevent you from being able to operate the computer.

Q. You press the Power button and nothing happens.

 $A_{ullet}$  Make sure that power is connected to the computer.

 $m{Q}_{m{\cdot}}$  The computer appears to be locked up and you cannot enter data.  $m{A}_{m{\cdot}}$  Restart the computer.

# Call Product Support

Simple instructions please contact the dealer, contact Ruggon representative, or leave a message visit the Ruggon website at https://www.ruggon.com.en/support/

To better assist you have the following information ready:

- Configuration number
- Serial number
- Operating system, BIOS, and MCU versions
- Service pack version
- System component versions
- If you are using security, know the type and the full set of parameters

# Chapter 5. Maintenance

# Cleaning the Device



Danger to electric shock when cleaning or maintaining the LR10S. To avoid electric shock, turn the LR10S off and disconnect it from the power supply before cleaning or maintaining it.

#### Housing

- The housing of the LR10S is best cleaned with a damp cloth.
- Use compressed air, a high-pressure cleaner or vacuum cleaner may damage the surface.
- Use a high-pressure cleaner, the additional risk of water entering the LR10S may damage the electronics or touch screen.

#### **Touch Screen**

- Use neutral detergent or isopropyl alcohol on a clean soft cloth to clean the panel surface.
- Prevent using any kind of chemical solvent, acidic or alkali solution.

### Returning the Device

Please put the contents in the original package gently when you need to return the LR10S.

# Contacting Ruggon

If you experience technical difficulties, please consult your distributor or contact the technical services department:

https://www.ruggon.com.en/support/

# Manufactory Information

Model Name: LR10S

Company Name: Ubiqconn

Factory Address: 5F., No.186, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan

Website: https://www.ruggon.com

# Chapter 6. Specification

LR10S Specification			
	CPU	Intel Elkhart Lake Pentium N6415, 1.2GHz 6.5W	
Suntam.	OS	Win 10 IoT Enterprise LTSC 21H2	
System	Memory	8GB LPDDR4	
	Storage	128GB SSD	
	WLAN	Intel AX210D2W 802.11 ax (2x2) MIMO ( Roaming support)	
Network/ Communication	Bluetooth	BT5.2	
Communication	GNSS	GPS/GLONASS/BeiDou/Galileo	
Dioploy	LCM	10.1" 800x1280 WXGA 16:10/800 nits	
Display	Touch	PCAP multi-touch	
	3.5mm Combo Audio jack	1	
	D-Mic	1	
I/O	Speaker	1 x 1W	
	micro-SD Card Slot	1	
	USB Type A	1 x USB 3.2	
	USB Type C	1 x USB 3.2 Gen2 for Power In/Charge/DP/PD	
Comoro	Front Camera	N/A	
Camera	Rear Camera	13MP Wide Angel (target 117° up) (AF)+Flash LED	
Pottom: <sup>9</sup> Power	Adaptor	45W (type C interface)	
Battery & Power	Battery	46.74Wh, No Swappable	
Dimension &	Dimension	265 x 180mm x 19.5mm	
Weight	Weight	1035g	
	Drop	MIL-810G, 120 cm	
Environment	Sealing	IP65	
Environment	Operating Temperature	-10°C~50°C	
	Storage Temperature	-20°C~60°C	
Certification	Certification	VCCI/Telecom/CB/CE/FCC	

Control /	Button/Key	1 x Power Button, 1 x Volume Key (+/-) , 1x Program Key
Indicator	LED Indicator	1 x Power LED, 1 x Charge LED