SPARK 7-T

User's Manual

Tablet

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Images shown in this document may vary slightly from actual products at time of shipping. Information in this manual is subject to change without notice.

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About This Manual

The SPARK 7-T User's Manual provides instructions for qualified personnel to follow when setting up a new SPARK 7-T 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://www.ruggon.com

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.
- Make sure the temperature for adapter will not be higher than 40 ˚C

Intended Use

The SPARK 7-T rugged tablet is equipped with multi-functional terminals for stationary and mobile applications in industrial environments such as logistics, warehousing, fleet management, manufacturing and the automotive industry.

Enhancing Industrial Safety and "Blind Operation" Capabilities

- Uninterrupted Line of Sight: Touch screens require operators to look down for visual confirmation, which is extremely dangerous when operating heavy machinery or hazardous equipment. Physical joysticks provide clear tactile feedback and muscle memory, enabling "blind operation" so operators can keep their eyes 100% focused on the worksite and moving equipment.

- Overcoming Protective Gear Limitations: In petrochemical, heavy electrical, or high-temperature plants, operators often wear thick insulating or protective gloves. Even the most sensitive touch screens fail under these conditions, whereas physical joysticks and buttons remain completely unaffected by glove thickness.

- Immunity to Water and Dirt Interference: Although rugged tablets feature water-drop touch capabilities, large films of water, heavy rain, mud, or thick oil spills can still cause false touches. Physical joysticks ensure absolute accuracy of control commands.

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 or UAS applications but not limit to 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 SPARK 7-T is designed and manufactured according to strict controls and following the stated safety regulations. The following list identifies incorrect operating uses of the SPARK 7-T. Incorrect use of the SPARK 7-T can lead to hardware damage, safety issues and possible risk to personnel health:

- The SPARK 7-T is under operation by untrained personnel;
- The SPARK 7-T is not maintained as recommended;
- The SPARK 7-T 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.

Electrical Hazards

Cleaning/Servicing: Power Off the SPARK 7-T

- Disconnect the SPARK 7-T 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 power cables meet industrial requirements for low-temperature flexibility, UV resistance, and oil resistance. Use only supplied power cables from RuggON.

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

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

Environmental Hazards

Do not use the SPARK 7-T 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 SPARK 7-T 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 SPARK 7-T 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.
- Please avoid contact with high temperature area when using if necessary, the contact time should be less than 10 seconds to avoid low temperature burns Connecting and Disconnecting External Devices

Connecting and Disconnecting External Devices

To prevent the considerable damage, the SPARK 7-T 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. 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 SPARK 7-T 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 SPARK 7-T from power before cleaning or servicing.
- Never clean the SPARK 7-T with compressed air, a pressure washer or a vacuum cleaner.
- If necessary, clean the housing of the SPARK 7-T with a damp cloth.
- Clean the touch-screen with a nonabrasive cloth.

Regulatory and Certification

FCC

Contain FCC ID: 2ABTU-C6490

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.
Transmitters in the 5.925-7.125 GHz band are prohibited from operating to control of or

communications with unmanned aircraft systems is prohibited, including drones.

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.

RF Exposure Information (SAR)

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.
SAR information on this device is on file with the FCC and can be found under the Display Grant section of https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm after searching on FCC ID: 2ABTU-C6490.

The highest SAR value for the device as reported to the FCC is 1.17 W/kg when placed next to the body.

CE Marking

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 order 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.

RF Exposure warning

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.

Operating Frequency and Max Output Power

This product operates within the following frequency bands and complies with the maximum transmittal power limits specified below:

Technologies	Frequency range (MHz)	Max. Transmit Power
Bluetooth BR/EDR	2402-2480 MHz	2.23
Bluetooth LE	2402-2480 MHz	8.68
WLAN 2.4 GHz	2412-2472 MHz	16.46
WLAN 5 GHz	5180-5240 MHz	14.51
WLAN 5 GHz	5260-5320 MHz	13.78
WLAN 5 GHz	5500-5700 MHz	13.44
WLAN 5 GHz	5745-5825 MHz	10.92
WLAN 6 GHz	5945~6425 MHz	18.26

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.

According to ISO / IEC Guide 22 and EN 45014
Manufacturer's Name: RuggON Corporation.
Manufacturer's Address: 4F, No. 298, Yang Guang St., NeiHu. Taipei, Taiwan, 11491
Declares, under our sole responsibility, that
Product Name: Rugged Tablet
Model Number: SPARK 7-T
Conforms to the following Product Specifications:
RED 2014/53/EU; LVD 2014/35/EU; EMC 2014/30/EU

Supplementary information
In addition, the product is battery powered and the power supply provided with this product has been certified to EN/ BS EN 62368-1: 2014 + A11 2017. As manufacturer, we declare under our sole responsibility that the equipment follows the provisions of the Standards stated above.
Importer of Record

Lithium Battery Safety Statement

Lithium battery inside. Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by battery manufacturer.

WARNING – There are no user-serviceable parts in the batteries. Do not disassemble or open, crush, bend or deform, puncture, or shred the battery. Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard. Do not expose to high temperatures .

WARNING – Improper battery use may result in a fire, explosion, or other hazard.
Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.
Avoid dropping the device or battery. If dropped, especially on a hard surface, and the user suspects damage to the battery, take it to a service center for inspection.
In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
Battery usage by children should be supervised.

Chapter 1. Introduction

The SPARK 7-T is a rugged Tablet.

Hardware Specifications

Item			Specification
Model Name			SPARK 7-T
Introduction			Rugged Tablet System
Device Dimension			
	Dimension		267mm x 183mm x 67mm (10.5inch x7.2inch x 2,6inch)
	Weight		1065g (2.2lb), no optional modules
System Platform			
	SOC platform		Qualcomm Dragonwing QCS6490,8-core CPU running up to 2.7GHz , 8G/128G
		OS	Android 14
		Language	Multi Language
Display			
	LCM		TFT, Transmissive, 7.02” diagonal
		Resolution	1200 x 1920
		Brightness	1680 nits (TYP) /1512 nits (min)
		Contrast Ratio	40000
	Touch Screen		
		Type	Projected Capacitive Type touch
		Functionalities	Capacitive multi-touch (PCT) Support auto-dimming (By system light sensor)

Power System	
Main Battery	11.625Vdc/Typical 3010mAh/34.9Wh The RUGGED TABLET supports Battery Hot-Swap feature (Optional) 10.8Vdc/2100mAH (Optional) 10.8Vdc/4200mAH
Charge Voltage	20V
Battery Life	2.5h ~4.0hours, typical, depends on RF modules
Power Input	
DC-IN	AC Adapter with/Type C (PD) 20 Vdc @3.25A 65W
RC controller / RF interface	Support USB Joystick (default)

Device Outlook & User Interface		
TOP		
	Thumbwheel	Z1/Z2: x2 Singal Axis
Bottom		
	I/O ports	(1) USB3.1 type C x1 support USB-C/DP (2) USB2.0 x1, 5V/0.7A (3) Ethernet x1 (RJ45 10/100Mb/s) (4) DC-IN by Type-C x1 (5) Net Warrior x1 (optional)
	Storage	Micro SD slot
	Tripod	Tripod screw hole: 1/4”-20 UNC
Front		
	Toggle Switch	T1: Toggle switch x1 with 3 level
	Buttons	1. Power Switch 2. F1~F4 programmable key; Default: F1: Vol. up for OS setting & programmable key/ Multi function F2: Vol. Down for OS setting & programmable key/ Multi function F3: Programmable key F4: Programmable key
	Light Sensor	for the auto dimming
	Power Indicator LED	LED Green/Yellow/Red colors, Ref. Table 3. Power LED Status
	Battery LED Indicator (on pack)	x4 Green LEDs show battery level, 1 button activates LED display.
	Speaker	x1 Speaker (Up to 1.0W)
Rear		
	Main Battery	x1
	Battery Latch	x1
	Releaser of Battery	X1
Connectivity		
WiFi		WiFi support follow SOM of Qualcomm 6490 /BT 3.2

About This Guide

The SPARK 7-T 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”* on page 46.

Parts List

The SPARK 7-T is shipped with the following items. All other accessories are sold and ordered separately. For help, contact your local RuggON sales representative. See *“Contacting RuggON”* on page 46.

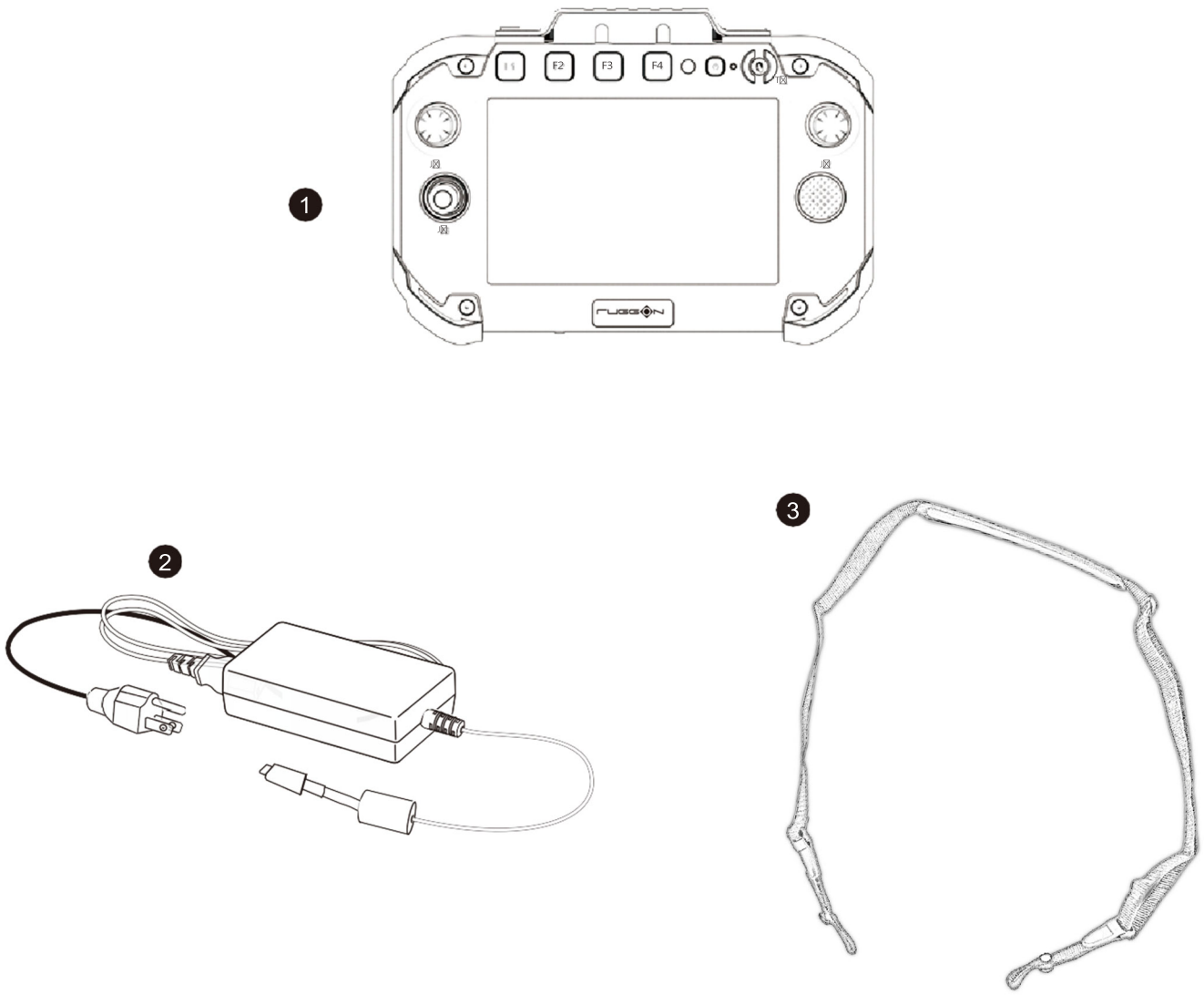

Figure 1. Parking list

① SPARK 7-T bare system (include Battery pack)
② AC adapter 65W with type-c connector x1,Power cord x1
③ Hand free trap

Identifying the Device

Overview

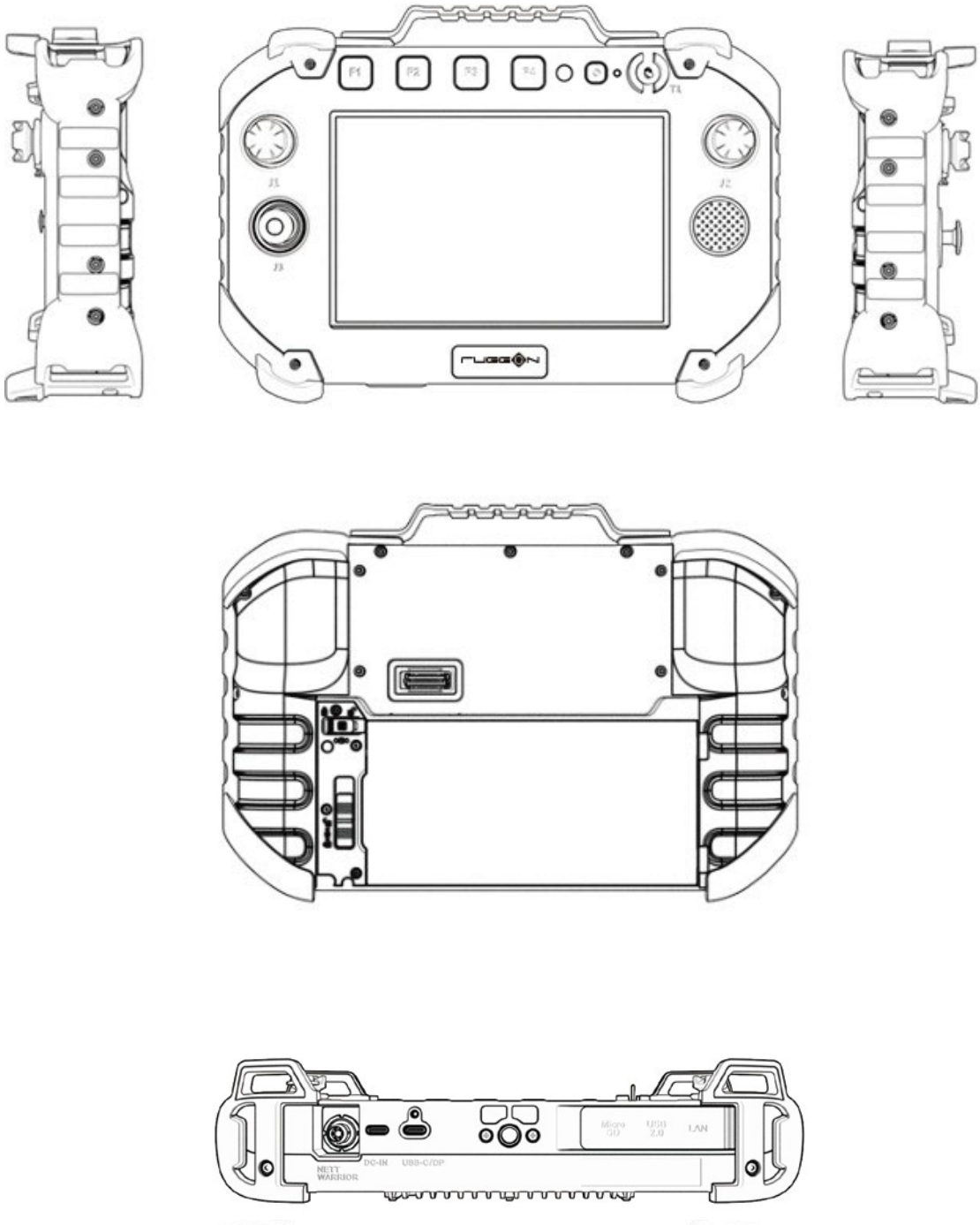

Figure 2. Overview (Bare system)

Table 2. Overview

No	Item	Description
1	Front view	See *"Front View"* on page 9 for further information.
2	Rear view	See *"Rear View"* on page 9 for further information.
3	Bottom view	See *"Bottom View"* on page 10 for further information.

Front View

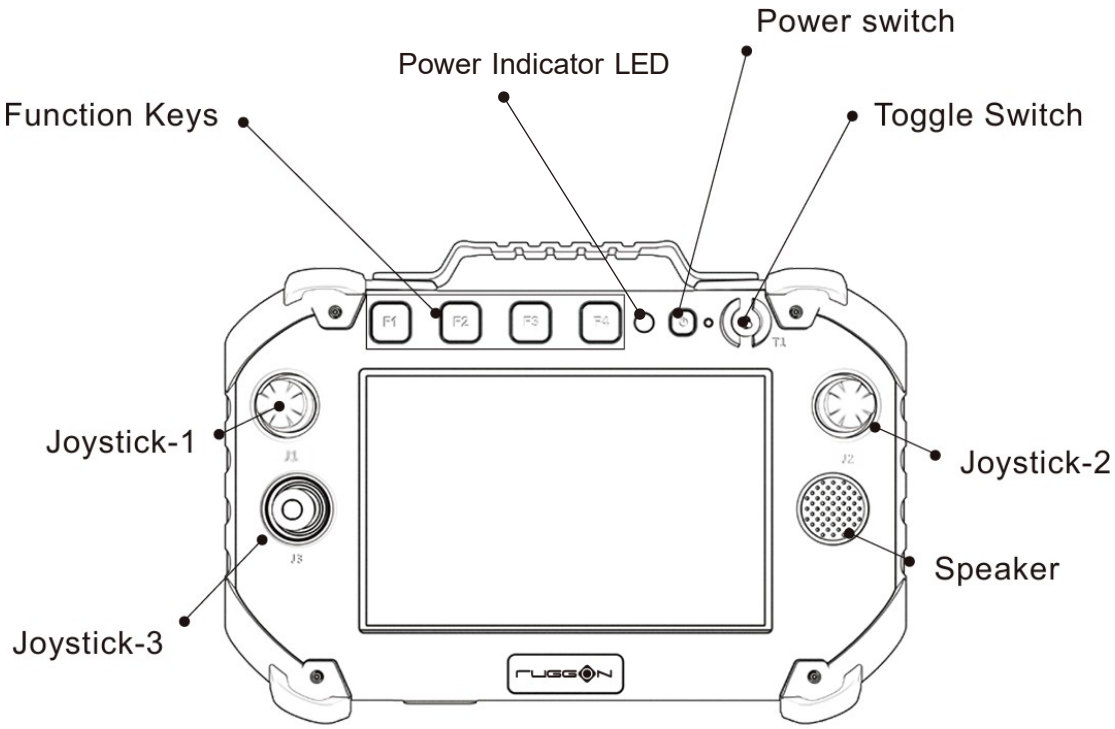

Figure 3. Frontside View

Rear side view

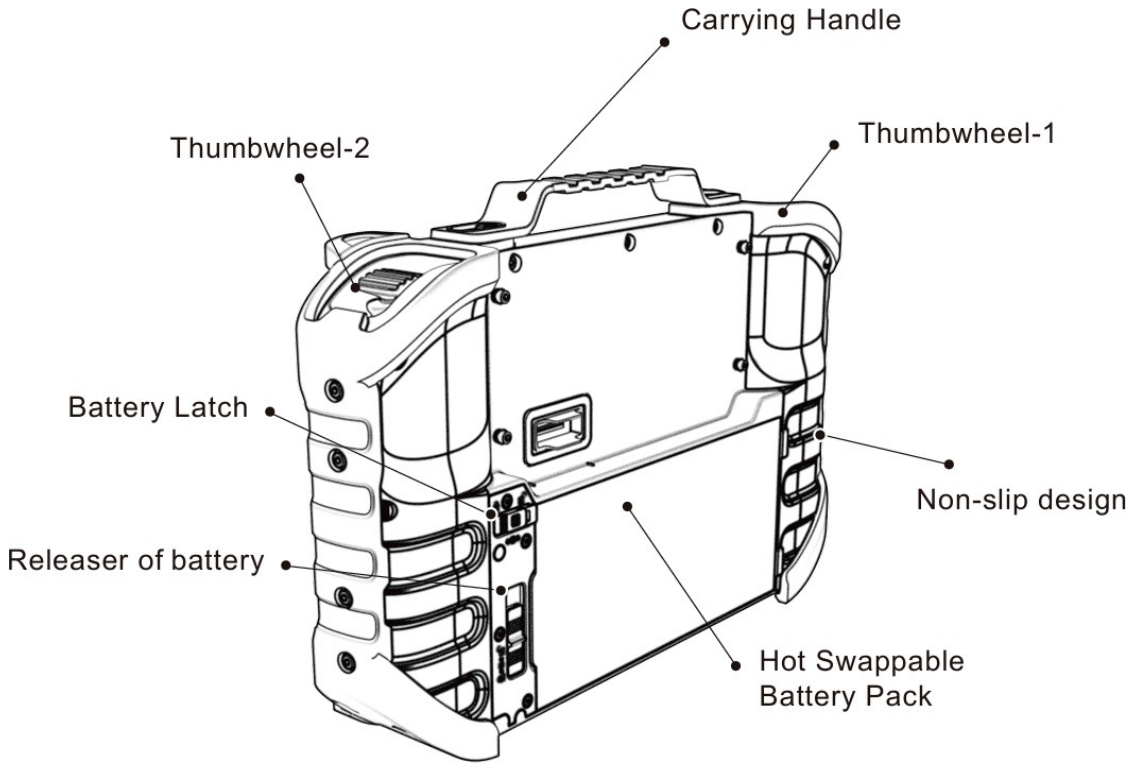

Figure 4. Rear side View

Bottom View

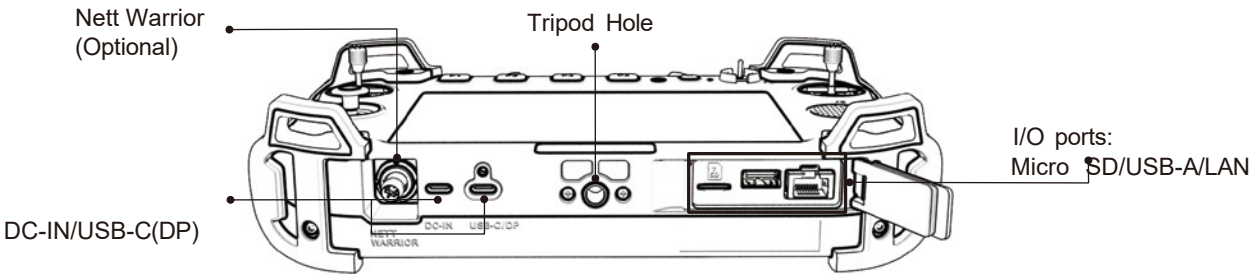

Figure 5. Bottom View

LED Status

Table 3. Power Indicator LED Status

LED / System Status	Green	Amber	Red
System on (bat discharging)	Solid		
System on (bat charging)		Solid	
System booting		Blinking	
Battery hot swapping			Blinking
Battery < 10%			Blinking

Dimensions

The following image lists the device dimensions without add-ons

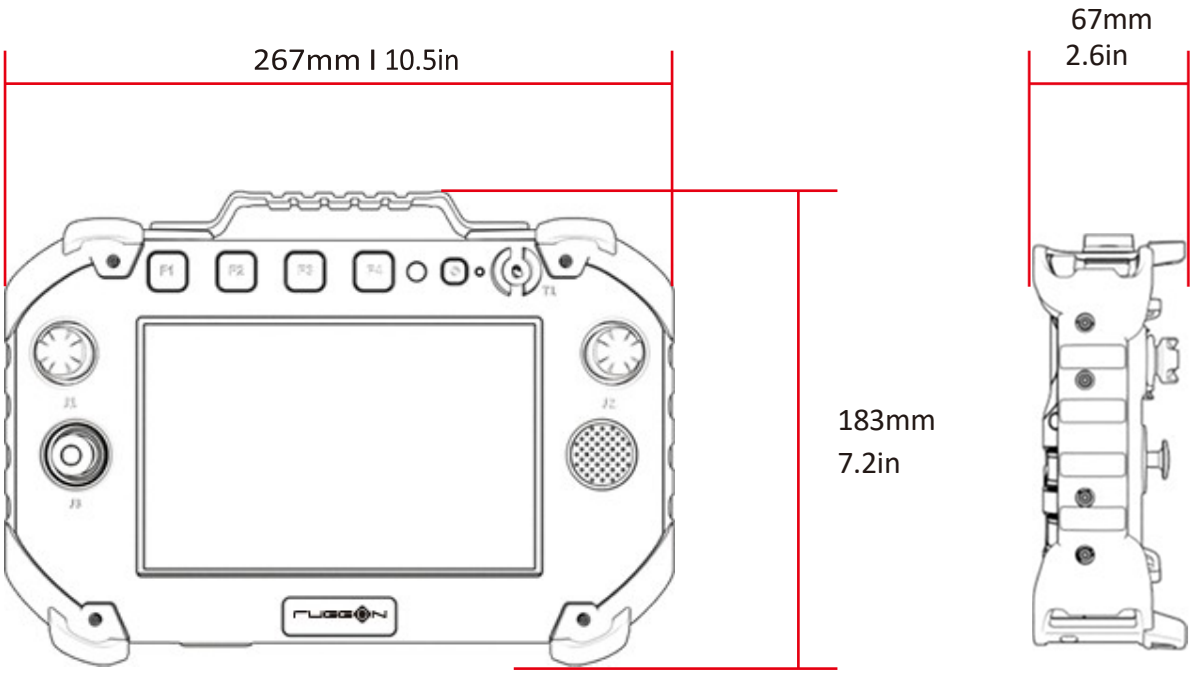

Figure 6. System dimensions

Chapter 2. Getting Started

This section provides an outline of the steps necessary to setup a new SPARK 7-T. A detailed guide follows the listed items, see as follows.

For additional technical assistance, contact your RuggON representative. See *"Contacting RuggON"* on page 46.

It is recommended to install 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

SPARK 7-T 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 power adapter to power on.

SPARK 7-T System Power-IN and Charging the Battery

When you use the AC adapter to connect your SPARK 7-T to a power outlet, the standard and external (optional) 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 DC-IN cover to expose the DC-IN jack.

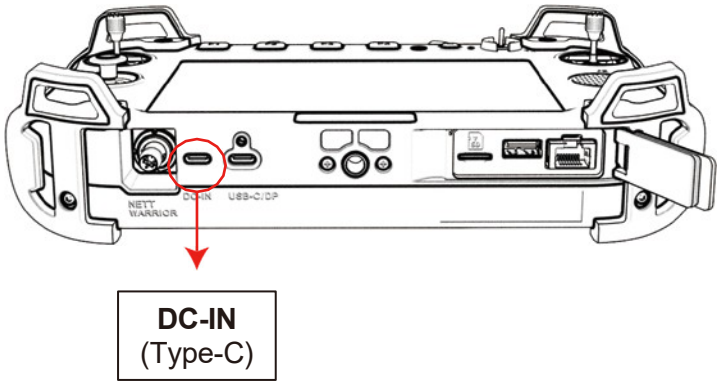

Figure 7. Find the DC-IN connector on bottom side

2. Connect the AC adapter to the DC-IN port.

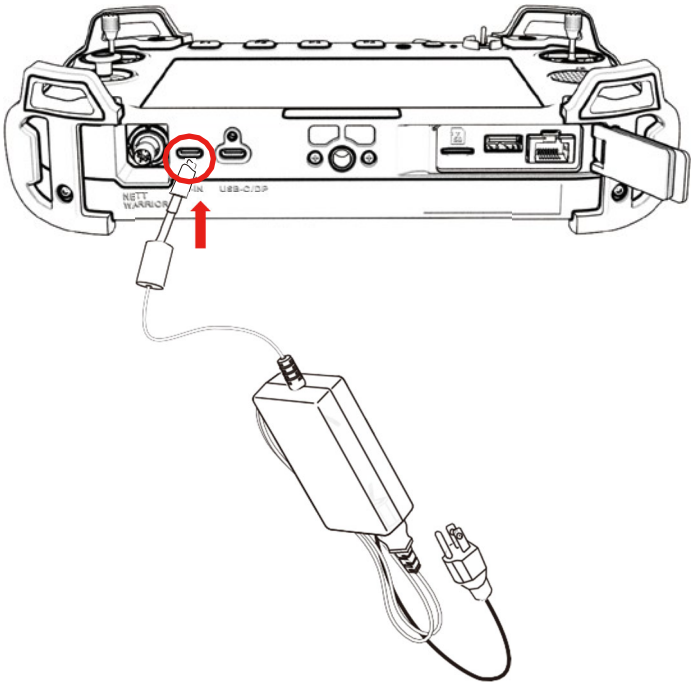

Figure 8. Connecting the AC Adapter

Powering the Device On and Off

Powering On the Device

Only power on the SPARK 7-T after connecting all of the peripherals and cabling.

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

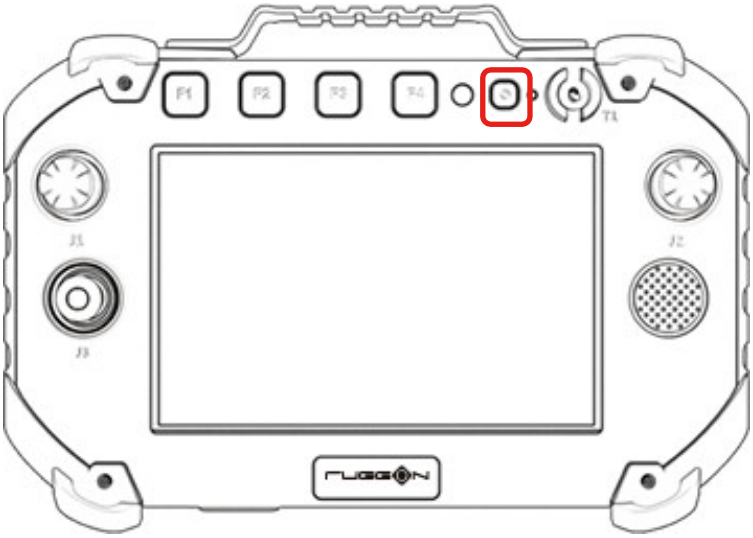

Figure 9. Power On the SPARK 7-T

Powering Off the Device

- 1. Press and hold the hard key power button ⏻ till screen show below diagram.

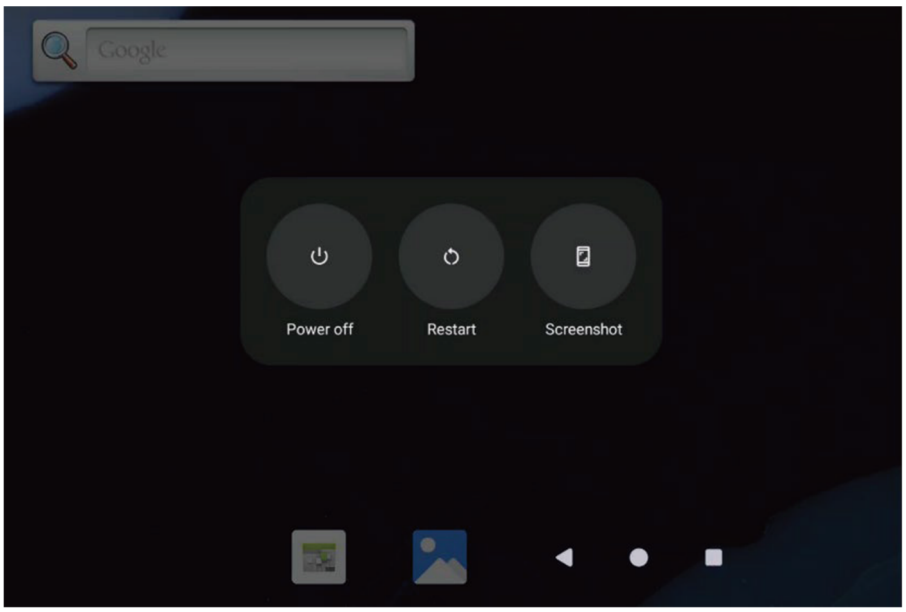

Figure 10. Power Off the SPARK 7-T

- Tap the “power off” icon ⏻ and the system will turn off.

Installing the Micro SD/Storage Card

The device includes a Micro SD card slot for the extra storage.

1. Flip open the IO cover of bottom side to expose the SD slot.
2. Insert the SD card fully into the slot, and the operating system will detect the micro SD card and access the storage.

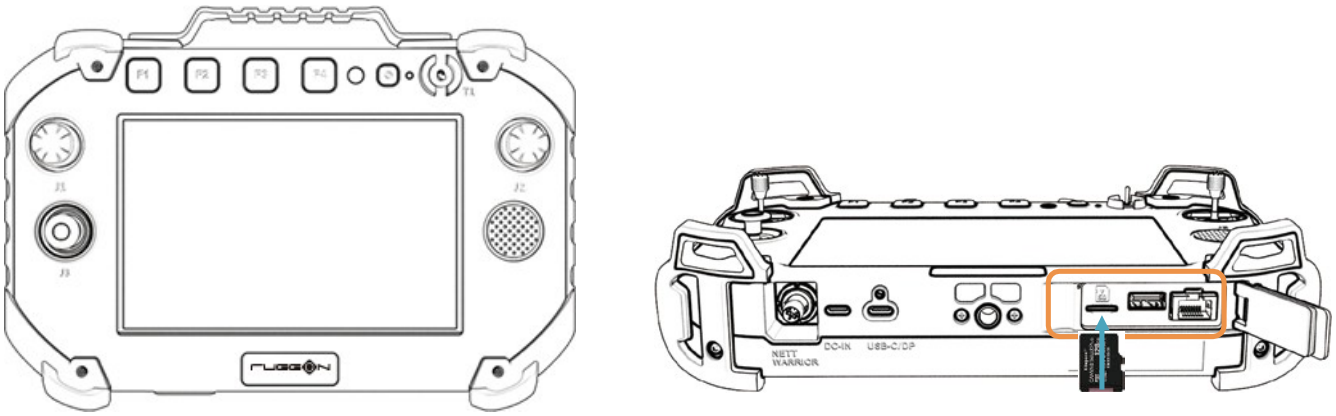

Figure 11. Open the IO Cover

Removing the Protective Film from the Display

The front display of the SPARK 7-T is protected during transport by a transparent film. This film should remain on the front display during assembly to void damage to the front display surface.

Only remove the film once all of the assembly work has been completed.

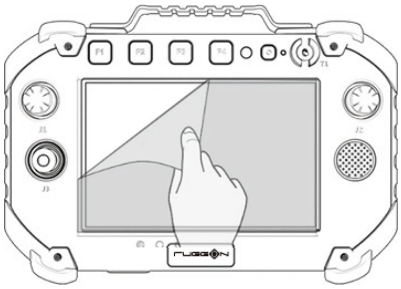

Figure 12. Removing the Protective Film

Chapter 3. Operation

Opening the I/O Compartment Cover

1. Place the device display side down on a clean work surface
2. Locate the I/O rubber cover on bottom side
3. Pull out the rubber cover of right side. (Only available for the bottom I/O compartment cover)

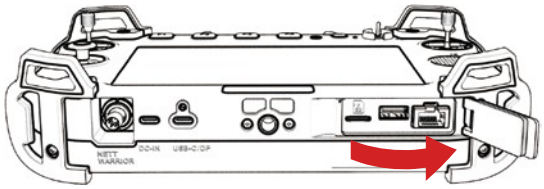

Figure 13. Pull out the rubber cover of right side

4. Connect IO ports cabling

   (1). USB 2.0 port: USB type-A connector

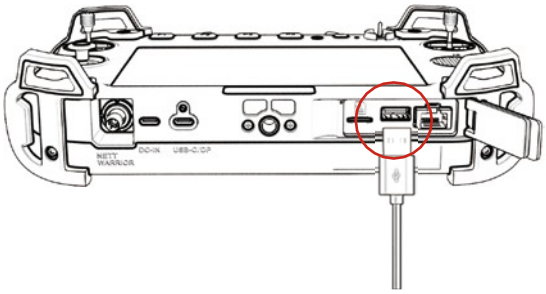

Figure 14. USB 2.0 port link with USB type-A cable

   (2). LAN port: Connect LAN cable to Ethernet port on the SPARK 7-T

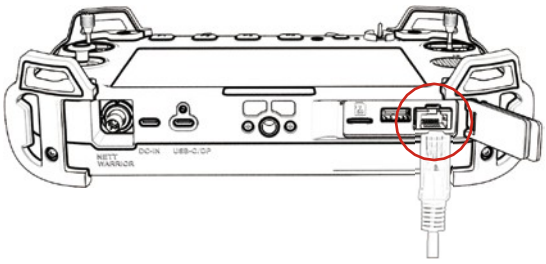

Figure 15. RJ-45 LAN port link with Ethernet cable

Connecting to External Cabling

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

1. Connect I/O ports cabling

(1). HDMI port request by optional converter cable

⇨ Purchase optional cable “ USB Type-c to HDMI” cable for this features

⇨ Please connect the cable as shown in the diagram below,
align the thumbscrew with the lock hole, and tighten it completely.

⇨ The HDMI interface on the other end of the adapter cable is available.

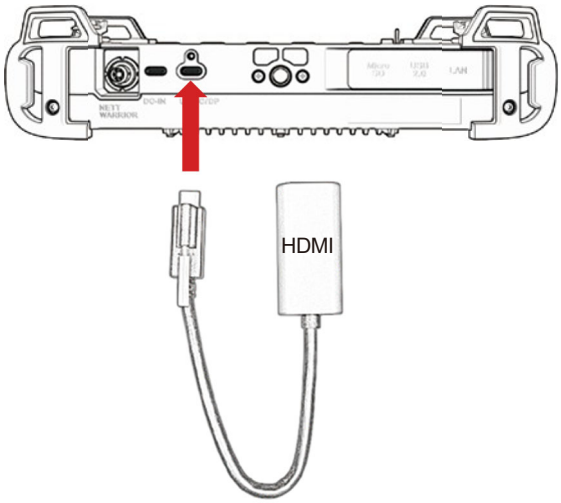

Figure 17. Connect USB-C to HDMI Cabling

Connecting the Neck Strap

1. The RUGGED TABLET hand free design with x4 hanging holes

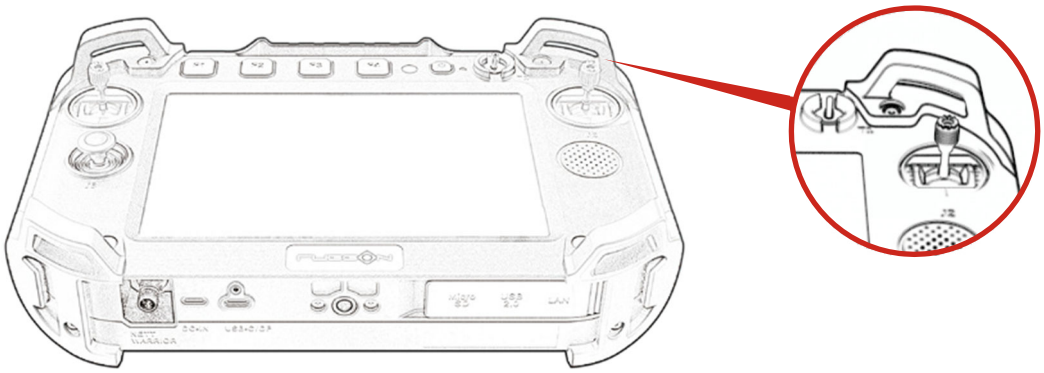

Figure 18. RUGGED TABLET hand free design with x4 hooks

2. **Button Connection** Thread both ends of the strap through any two of the four mounting holes on the RUGGED TABLET (as shown). Align the metal button with the strap hole and press firmly until securely snapped in place.
3. **Velcro Fastening** Align the hook side with the loop side of the Velcro at the strap end. Press together firmly, ensuring the Velcro lies flat and fully bonded without any lifting edges.

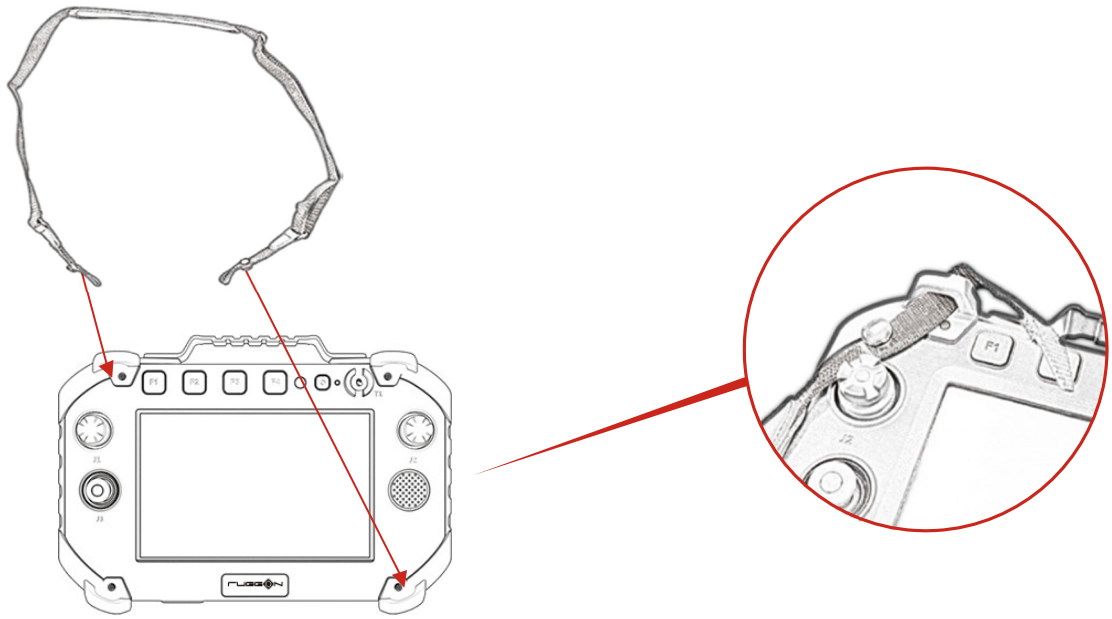

Figure 19. Fasting the hand-free hooks

4. **Length Adjustment** Slide the adjustment buckle to set the desired length until the RUGGED TABLET sits comfortably at neck level.

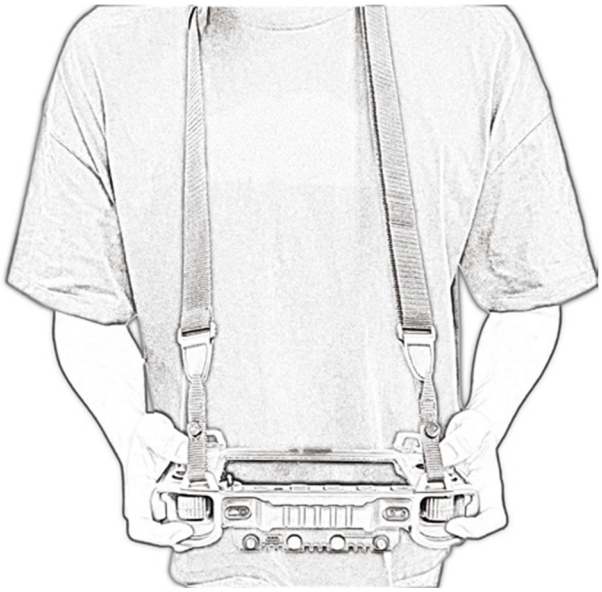

Figure 20. Operators operate the RUGGED TABLET and wear neck straps.

Removing the Neck Strap

1. **Undo** the above operations

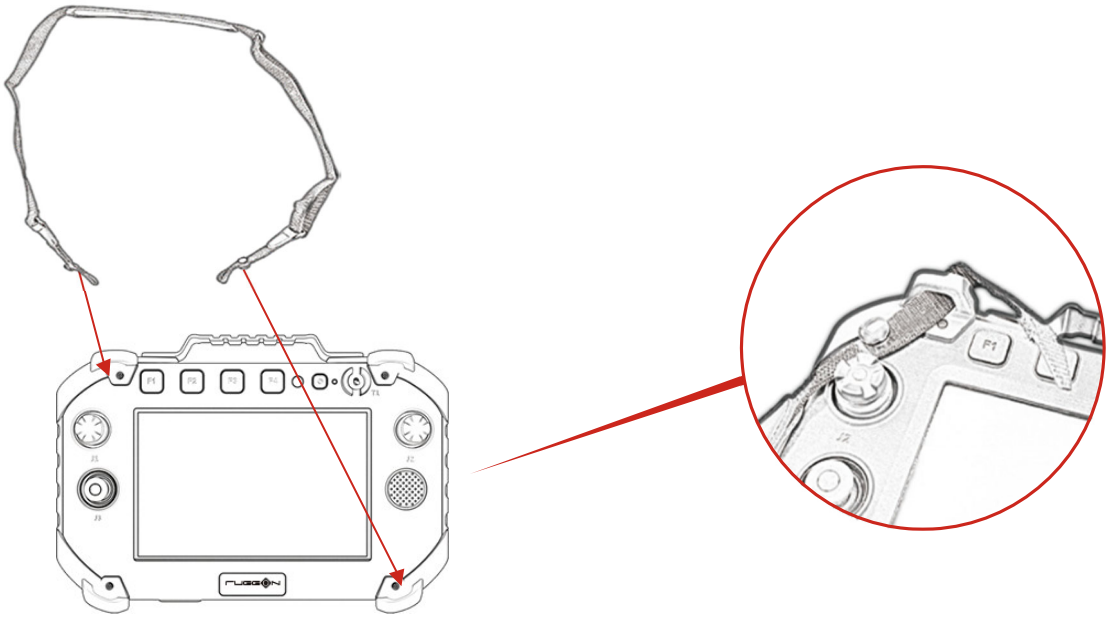

Figure 21. Removing the neck Strap

How a RUGGED TABLET locks onto a Tripod

A tripod connects to a RUGGED TABLET through a **quick-release plate system**. First, screw the quick-release plate into the RUGGED TABLET's bottom thread (standard 1/4"-20). Then slide the plate into the tripod head's clamp slot. Finally, tighten the locking lever or knob on the head to secure everything firmly.

PS: Please use a tripod weighing less than 5KG. Tripod is not an accessory the connection methods vary, please refer to the tripod manufacture’s user manual

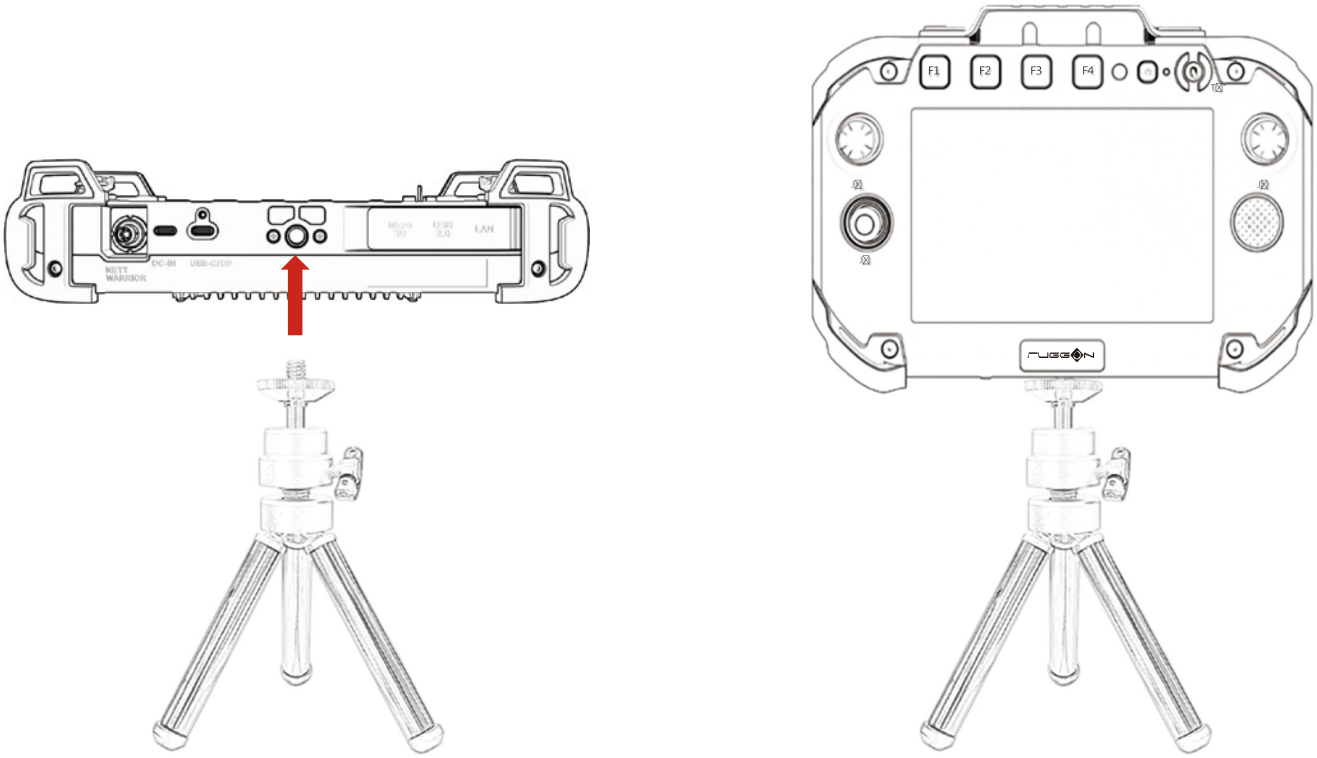

Figure 22. RUGGED TABLET locks onto a Tripod

Installing the Standard Battery

The following instructions are for both standard and external batteries. The external battery is an optional component. Only use components specifically designed for this device. Contact your local representative for ordering information.

Make sure the power switch is switched to ON before installing the standard/external battery. See *"First Time Use"* on page 14.

1. Place the device display side down on a clean work surface.
2. Locate the battery and ensure the Battery Latch is in the Unlock position.

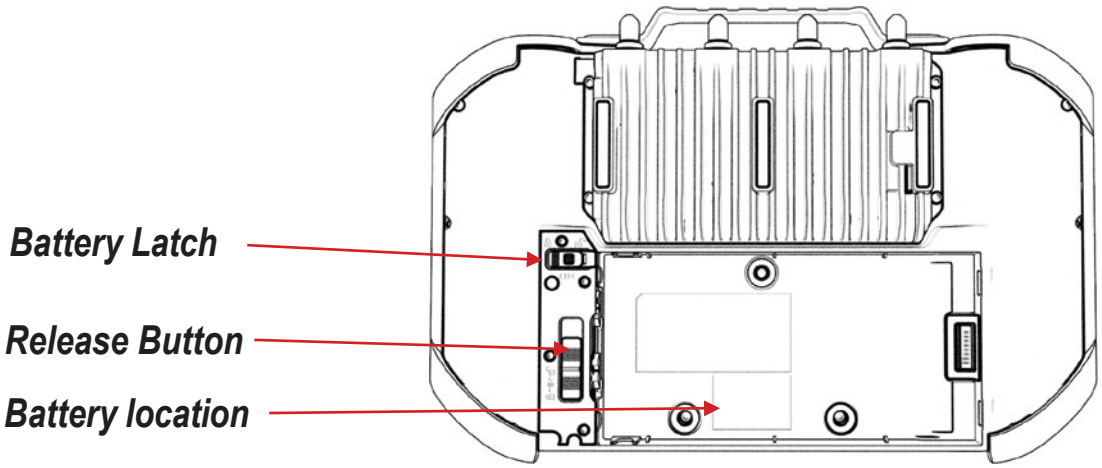

Figure 23. Rear View: Locating the Battery

3. Align the tabs on the battery with the slots on the chassis.
4. Angle the battery in place and set the tabs in the chassis slots.
5. Lower the raised end of the battery and press in place until an audible click is heard.

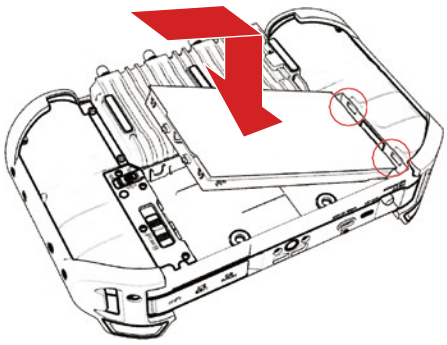

Figure 24. Installing the Battery

6. Slide the locking switch on the top-left side to lock the battery.

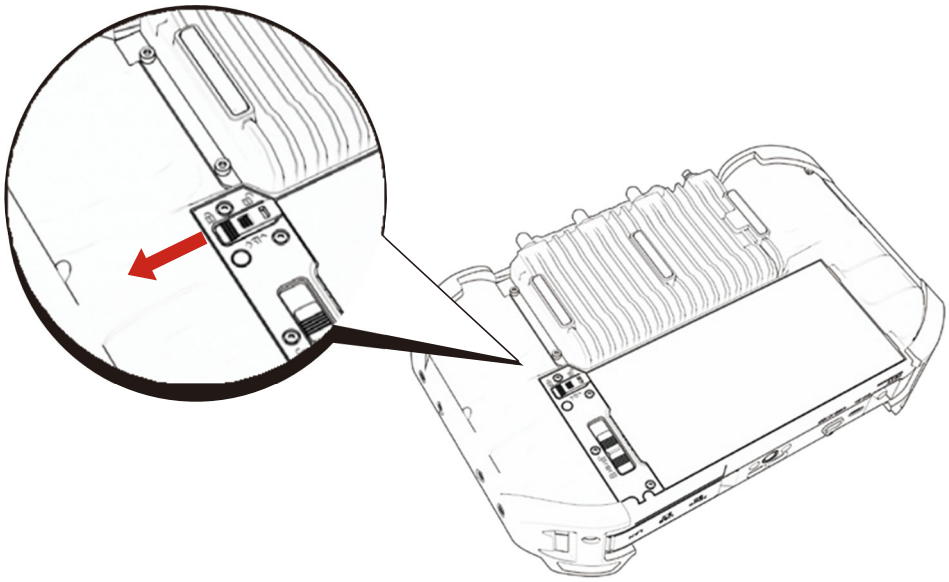

Figure 25. Locking the Battery

Make sure the latch is securely locked to prevent the battery from falling.

Removing the Standard Battery

1. Place the device display side down on a clean work surface.
2. Locate the battery.

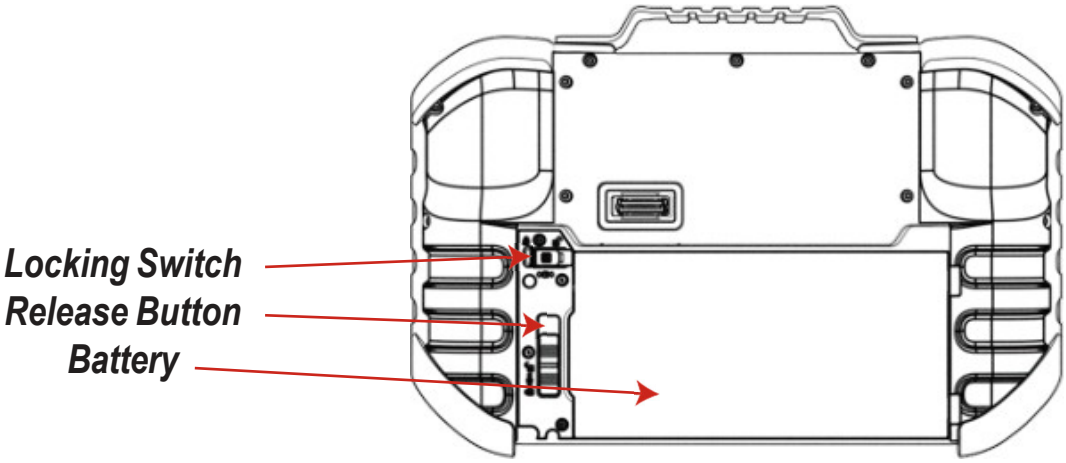

Figure 26. Rear View: Locating the Battery

3. Slide the locking switch to the unlock position.

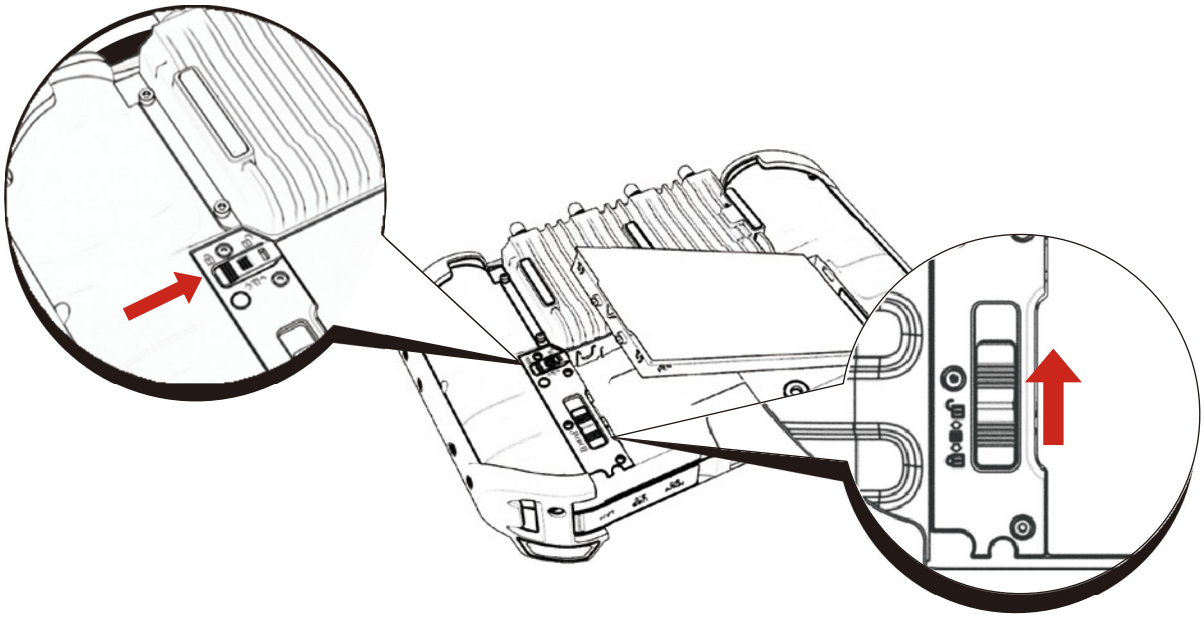

Figure 27. Unlock the Battery

4. As shown in the picture, press and hold the release button and push upwards to release the battery.
5. Hold the battery and angle the left side up to remove.

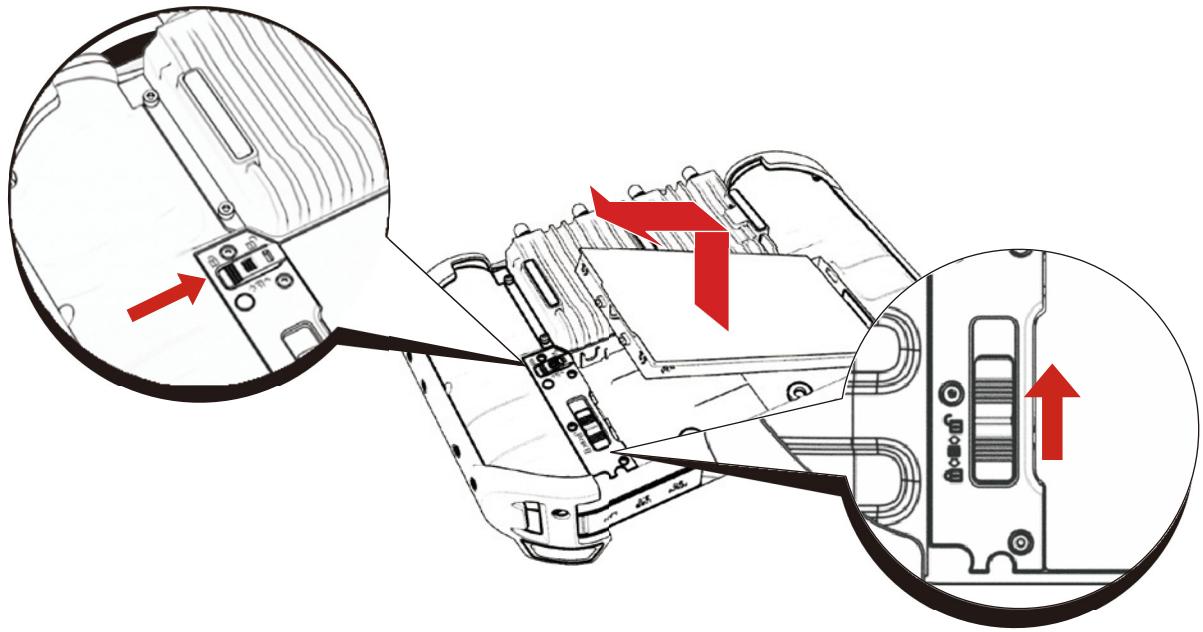

Figure 28. Removing the Battery

Checking Battery Status

The Battery unit with battery capacity detector, press “Battery trigger” key and the LED indicators will show the battery status as below:

Table 4. Battery LED Status table

Battery Status	LED Indicator
Above 80% capacity	Three indicators on
50% - 80% capacity	Two indicators on
20% - 50% capacity	One indicator on
Below 20% capacity	One indicator blinking

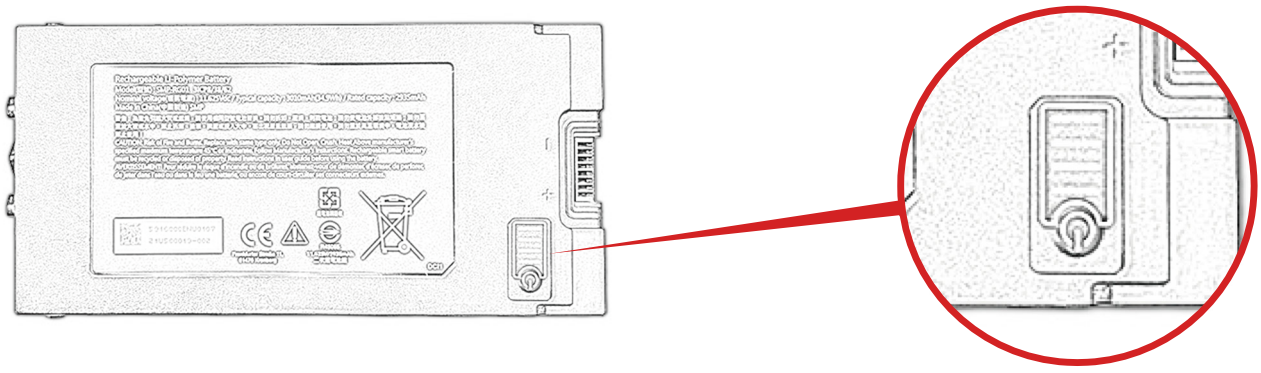

Figure 29 the Battery capacity by LED indicator

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 is responsible only for ensuring that the hardware matches the original configuration when repairing or replacing the computer.

Troubleshoot the Screen issue

Q. The screen will automatically turn off (default one minute) if you do not use RUGGED TABLET for a period of time.

A. 1. Press the power button to wake up the screen.

2. Manual to modify the “Screen timeout” if you want to chance
   (a). Clocking Settings -> Display -> Screen Timeout
   (b). Set your preferred Screen Timeout (15sec. ~ 30min.)

Q. How do I manually adjust the screen’s brightness?

A. The RUGGED TABLET brightness supports up to 1,500/1680nits and the system is to automatically dim. Users can refer to Chapter 4
5. Screen Brightness Adjustment
Manually adjust the screen brightness.

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. Make sure that power is connected to the computer.

Q. The computer appears to be locked up and you cannot enter data.

A. 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.

To better assist you have the following information ready:

- Configuration number
- Serial number
- Build number, MCU M0 version and MCU H7 version, ref. manual
- 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 SPARK 7-T.

To avoid electric shock, turn the SPARK 7-T off and disconnect it from the power supply before cleaning or maintaining it.

Housing

- The housing of the SPARK 7-T 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 SPARK 7-T 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 SPARK 7-T.

Contacting RuggON

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

https://www.ruggon.com

RUGG Tablet