



trackit SOLO



USER MANUAL



Imagine EEG Anywhere



Lifelines Ltd

1 Tannery House, Tannery Lane,
Woking, Surrey, GU23 7EF UK
Telephone +44 (0) 1483 224 245
www.lifelinesneuro.com
sales@lifelinesneuro.com



Incereb Ltd.

6 Charlemont Terrace, Crofton Road,
Dun Laoghaire, Dublin, A96 F8W5. Ireland.

No:	51354-006
Part No:	1704
Issue:	1.0
CCN:	-
Created	Piers Cross Digitally signed by Piers Cross Date: 2023.11.30 18:48:07 Z
Checked	
Approved	

Customer Responsibility

The Trackit Solo is reliable only when operated and maintained in accordance with the instructions contained in this manual, accompanying labels, and inserts. A defective system should not be used. Parts that may be broken or missing or those that are clearly worn or contaminated should be replaced immediately with new original replacement parts that have been manufactured by or are available from Lifelines.

The owner of this system has the sole responsibility for any malfunction resulting from improper use or maintenance, or repair done by anyone other than a qualified Lifelines representative and for any malfunctions caused by any parts that have been damaged or modified by anyone other than a qualified Lifelines representative.

The owner of this system has the sole responsibility for the connection of this product to other systems which do not satisfy the electrical safety requirements of standards IEC 60601-1 and IEC 60601-1-2 for medical devices.

NOTE: Any serious incident that has occurred in relation to the Trackit Solo should be reported to the manufacturer and, where applicable, the competent authority of the EU Member State in which the user and/or patient is established.

Disclaimers & Warranties

The information in this section is subject to change without notice.

Except as stated below, Lifelines Ltd makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Lifelines shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

Lifelines shall warrant its products against all defects in material and workmanship for one year from the date of delivery.

Misuse, accident, modification, unsuitable physical or operating environment, improper maintenance or damage caused by a product for which Lifelines is not responsible will void the warranty.

Lifelines do not warrant uninterrupted or error-free operation of its products.

Lifelines or its authorised agents will repair or replace any products that prove to be defective during the warranty period, provided that these products are used as prescribed in the operating instructions in the user's and service manuals.

No other party is authorised to make any warranty to assume liability for Lifelines products. Lifelines will not recognise any other warranty, either implied or in writing. In addition, services performed by someone other than Lifelines or its authorised agents or any technical modification or changes of products without Lifelines prior, written consent may be cause for voiding this warranty.

Defective products or parts must be returned to Lifelines or its authorised agents, along with an explanation of the failure. Shipping costs must be prepaid.

Lifelines Ltd. manufactures hardware and software to be used on or with standard PC-compatible computers and operating software. Lifelines, however, assumes no responsibility for the use or reliability of its software or hardware with equipment that is not furnished by third-party manufacturers accepted by Lifelines at the date of purchase.

All warranties for third-party products used with the Trackit Solo are the responsibility of the relevant manufacturer. Please refer to the relevant documentation on each product for further details.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced in any other form or translated into another language without the prior written consent of Lifelines.

Trademarks

Microsoft and Windows are registered trademarks of the Microsoft Corporation. All other trademarks and product names are the property of their relevant owners.

Responsibility of manufacturer

The manufacturer and distributor consider themselves responsible for the equipment's safety, reliability and performance only if:

- any peripheral equipment to be used with the Trackit Solo is supplied by third-party providers recommended by the manufacturer;
- assembly operations, extensions, readjustments, modifications, or repairs are carried out by person authorised by the manufacturer;
- the electrical installation of the relevant room complies with the appropriate requirements;
- the equipment is used by a healthcare professional and in accordance with the instructions for use.

NOTE: the manufacturer has a policy of continual product improvement; hence the equipment specifications are subject to change without notice.

Check with Lifelines or your distributor if a software update is available.

NOTE: Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the Appendix.

Software and Virus Protection

Lifelines takes all reasonable steps to ensure that its software is virus-free. In line with modern computing practice, it is advisable that continual protection against viruses, trojans, malware, adware etc. is provided on the PC used for installation and the surrounding systems. Please note the following recommendations which should be supported by your internal IT/Computing department procedures and practices:

- Virus protection software should be installed on every computer at risk of infection. This software should have a resident (online) shield and provide email scanning if appropriate.
- Virus scanning should be set to manual mode or automatic if desired but at a time when the system is not being used.
- All programs offering auto-update features, including Windows, should be set to manual or automatic if desired but at a time when the system is not being used.
- Adopt formal departmental or organisational procedures to ensure the integrity and safe operation of the medical equipment and supporting systems.

General Security Policies

- Prevent physical access to the system from unauthorized persons.
- Make frequent backup of the system. Store the backup on a safely stored device.
- The user should lock the system manually if they leave it unattended.
- Short inactivity timeouts are always active and lock the system when the timeout expires.
- Do not install any 3rd party software which is not intended for use with the application.
- An unknown software can possess a potential security risk.

Networked Environments

- Connect the system on secured networks only.
- Using the system on a wide-open network is not recommended.
- Keep the network software updated with latest patches.
- Use encrypted data communication over "less safe" network segments (ipsec, VPN).
- All resources within the network can only be accessed by authenticated users.

Warnings and Cautions

	Warning sign indicates a situation or procedures that may be dangerous for the patient and/or user.		Caution sign indicates a situation or procedures that may cause equipment damage or its improper usage.
	The Trackit Solo EEG system must only be used by a healthcare professional, within a hospital or clinical setting, who has the training and knowledge to undertake EEG examinations and is familiar with EEG equipment and practice. This user manual must be read in its entirety before the equipment is used.		
	Do not modify this equipment without the authorization of the manufacturer.		
	The use of accessories, transducers and cables other than those specified, with the exception of transducers and cables sold by the manufacturer of the equipment as replacement parts for internal components, may result in increased emissions or decreased immunity of the equipment.		
	The equipment or system should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, the equipment or system should be observed to verify normal operation in the configuration in which it will be used.		
	Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Trackit Solo, including cables specified by Lifelines Ltd. Otherwise, degradation of the performance of this equipment could result.		
	When in close proximity to the Trackit Solo and the EEG amplifier do not use mobile phones, transmitters, power transformers, motors, or other equipment that generates magnetic fields.		
	Do not allow any liquid to enter the case of the Trackit Solo. Do not use acetone on any of the instruments.		
	Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the Appendix.		

Contraindications

There are no known contraindications to the use of this equipment.

Residual Risks and Side Effects

There are no known residual risks or side effects for procedures performed with the Trackit Solo. Please take note of the Warnings and Cautions before using the Trackit Solo.

Contents

Disclaimers & Warranties	2
Warnings and Cautions	4
1 Overview and Technical Description	6
1.1 General Description.....	6
1.2 Explanation of symbols.....	7
1.3 Component and Part Numbers.....	7
2 Installation and Maintenance.....	8
2.1 Checks for completeness and integrity.....	8
2.2 Environmental parameters for operation	8
2.3 Power supply connections	8
2.4 Use with other equipment	9
2.5 Interference.....	9
2.6 Maintenance and cleaning.....	10
2.7 Disposal of equipment	10
3 Operation	11
3.1 Overview.....	11
3.2 Setting up the Trackit Solo.....	12
4 LTE / 4G Mobile connectivity.....	16
4.1 SIM card	16
4.2 Activating / Deactivating LTE.....	16
4.3 Web User Interface (UI).....	17
Version History	23

Appendices

Appendix 1: Trackit Solo Specifications	21
Appendix 2: Regulatory Statements	23
Appendix 3: Manufacturer's Declaration.....	24

Illustrations

Figure 1 The system setup.....	11
Figure 2 Front of Trackit Solo.....	16
Figure 3 Back of Trackit Solo.....	16

1 Overview and Technical Description

1.1 General Description

Intended Use

The Trackit Solo is intended to be used in combination with a compatible Lifelines EEG amplifier for the collection and display of video and EEG data in EEG studies.

Intended User

The intended user of the device is a healthcare professional who has the training and knowledge to undertake EEG examinations and is familiar with EEG equipment and practice.

Trackit Solo Setup and Description

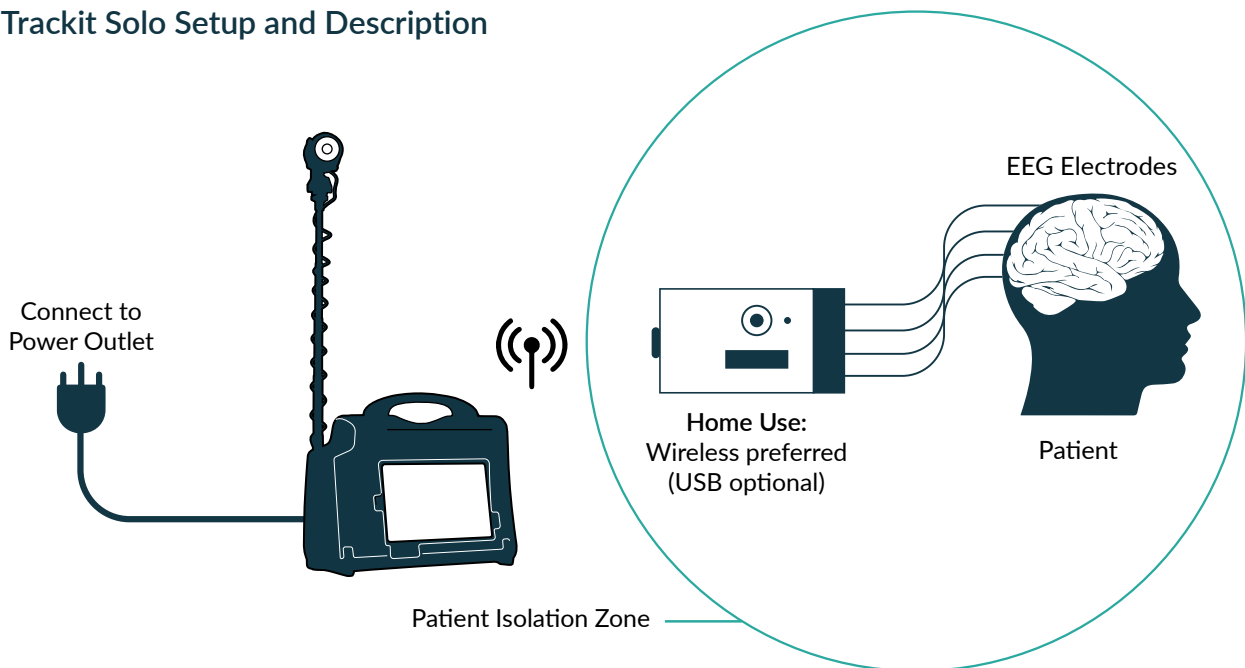


Figure 1 Trackit Solo setup







The Trackit Solo is a portable data acquisition and communications system that works in tandem with Lifelines EEG amplifiers (e.g. Trackit T4A) to allow EEG and video data to be recorded locally and monitored remotely. The Trackit Solo wirelessly receives data from the EEG amplifier (via Bluetooth) and relays that data, along with video data acquired from the onboard camera, via the EEG software package which runs locally on the Trackit Solo. The data can then be relayed to an approved cloud-based software (e.g. Stratus iEEG), which allows clinical staff to access and monitor the data from any compatible device. Alternatively, the data, which is recorded locally as well, can be accessed via a remote desktop application (e.g. Teamviewer).

The Trackit Solo comprises a 10" tablet PC with a high-definition, infra-red camera. The system is powered with a medical grade power supply to ensure patient safety. The HD camera is fitted to a retractable extension pole. The Trackit Solo feature a Lithium-ion battery power source and can run on battery for up to 3 hours (EEG software dependant).








The EEG System contains several wireless connections, including Bluetooth from the Trackit Solo to the amplifier, as well as WiFi and LTE from the Trackit Solo to a remote network for data upload to the cloud-based software. The Trackit Solo contains an infrared camera (e.g. Lifelines Neuro Trackit Cam) that can be manually repositioned to keep the patient in view. This camera is mounted to the Trackit Solo. The Trackit Solo has additional USB & Network ports available for the connection of additional or different approved cameras.

The Trackit Solo is lightweight and durable. It possesses a shoulder strap and a handle that allows it to be carried. This allows the Trackit Solo to be moved with the patient. The Trackit Solo is designed such that it can be wirelessly connected to an ambulatory amplifier by clinical personnel, and then used by the patient for the duration of an EEG study in their home or clinical environment. After the study is completed, clinical personnel can disconnect the patient from the amplifier and retrieve the Trackit Solo.

1.2 Explanation of symbols

Symbol	Description
	Follow operating instructions
	Class 2 Functional Earth appliance
	Keep dry
	Manufacturer
	European Representative
	Special recycling required, do not dispose of in landfill. When this equipment has reached the end of its useful life, it must be disposed of in an environmentally-friendly way. Waste electrical and electronic equipment (WEEE) requires special procedures for recycling or disposal. This includes batteries, printed circuit boards, electronic components, wiring and other elements of electronic devices. Follow all of your respective local laws and regulations for the proper disposal of such equipment. Contact your local distributor for information concerning this.

Storage and transport symbols


Symbol	Meaning	Symbol	Meaning	Symbol	Meaning
	Temperature limits		Fragile		Keep dry
	Relative humidity limits		Barometric pressure limits		

1.3 Component and Part Numbers

Component	Part Number
Trackit Solo	1700xx-L1 (xx = US, UK or EU)

2 Installation and Maintenance

The following section must be read and understood before the equipment is switched

	Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the Appendix.
---	--

The function or safety of the equipment could be impaired if it has been subjected to unfavourable conditions in storage or in transit. If at any time function or safety is thought to be impaired, the instrument should be taken out of operation and secured against unintended use.

The manufacturer should be contacted (details on page ii) for assistance, if needed, in setting up, using or maintaining the equipment; or to report unexpected operation or events.

The assembly of the system and any modifications during its service life require evaluation to the requirements of IEC 60601-1.


2.1 Checks for completeness and integrity

- 1 Remove the equipment from the packaging case(s).
- 2 Use the parts list to check that all ordered items have been received.
- 3 Check for signs of damage that may have occurred during transit or storage. If any damage is found, do not use the instrument; contact your distributor.

2.2 Environmental parameters for operation

The operational and storage/transportation environmental conditions are as follows:

Operation		Storage and transport	
The instrument is designed to operate within the following ranges:		When the instrument is in store or being transported, the following ranges are tolerated:	
Temperature	-10°C to +45°C (+14°F to +113°F)	Temperature	-20°C to +60°C (-4°F to +140°F)
Relative humidity	0% to 90% non-condensing	Relative humidity	0% to 95% non-condensing
Atmospheric pressure	700mB to 1060mB	Atmospheric pressure	500mB to 1060mB

	Do not obstruct any cooling slots. Position the instrument so that air flows freely.
---	--

2.3 Power supply connections

Power requirements	100-240V~, 50-60Hz
Power consumption	60W (Maximum)

2.4 Use with other equipment

EEG amplifier

The patient will be connected to an EEG amplifier during the EEG examination. The EEG amplifier will be connected to the Trackit Solo via Bluetooth or USB to record the data acquired by the EEG amplifier.

Other patient-connected equipment

The Trackit Solo has no patient-applied parts and so when used simultaneously with other patient-connected equipment, for example a cardiac pacemaker or other electrical stimulator, it is unlikely that a safety hazard will arise. However always consult the documentation supplied with the other patient-connected equipment to ensure that all hazards, warnings and cautions are considered before the equipment is used together.

Leakage current




This instrument is designed to comply with IEC 60601-1, the international standard for medical electronic equipment, which specifies the permissible levels of leakage current from individual products. A potential hazard exists in the summation of leakage currents caused by connecting several pieces of equipment together. Because this instrument can be used in conjunction with standard electronic devices, the total leakage current should be tested at regular intervals.

2.5 Interference

The Trackit Solo will continue to operate in the presence of radio frequency magnetic fields (RF) and the effects of electrostatic discharges (ESD) and other interference, in accordance with the requirements of IEC 60601-1-2. However, EEG systems record signals of very low amplitude, and these signals themselves are not immune to the effects of RF, ESD and low-frequency magnetic field interference. Such interference may cause signal artefacts.

The Trackit Solo has internal Wifi, Bluetooth and LTE radios fitted. There are approved industry-standard types which present minimal risk of reciprocal interference with other equipment.

However, when the equipment is operated with or without Bluetooth connected, other devices in the vicinity should be moved away or turned off to reduce the likelihood of interference to the equipment or by the equipment.

	Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Trackit Solo, including cables specified by Lifelines Ltd. Otherwise, degradation of the performance of this equipment could result.
	When in close proximity to the Trackit Solo, do not use mobile phones, transmitters, power transformers, motors, or other equipment that generates magnetic fields. Refer to the Appendix for more information.
	Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the Appendix.

2.6 Maintenance and cleaning

The Trackit Solo and its accessories require no routine testing, calibration, or maintenance procedures apart from cleaning and occasional checking for wear and damage to all parts including the accessories.

No servicing or maintenance of the equipment should take place while in use with a patient.

Cleaning and disinfection

Prior to each re-use of the system, all the outer surfaces of the Trackit Solo and its accessories may be cleaned, as required, with a cloth moistened with a mild detergent solution.

Disinfection of the equipment can be carried out by the use of QAC-based disinfectants. Wipes are recommended to prevent the ingress of any liquid into the equipment. Suitable products include Mikrozyd Sensitive Wipes (Schülke & Mayr GmbH), Microbac forte (Paul Hartmann AG), Distel Wipes (Tristel Ltd.), Mikro-Kill disinfectant wipes (Medline Industries, Inc.), Sani-Cloth HB Germicidal Wipes (PD International, Inc).



Do not allow any liquid to enter the case of any instrument or connector.
Do not use acetone on any of the instruments.

2.7 Disposal of equipment

When the device has reached the end of its operating life, it should be disposed of in accordance with local waste regulation authority that is typically within the local government office.

Dispose of used battery packs promptly and keep away from children.



Do not dispose of battery packs into fire or by incineration.

3 Operation

3.1 Overview



Figure 2 Front of Trackit Solo

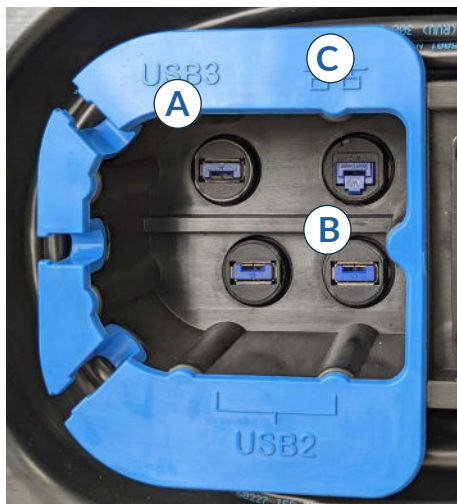
Indicators

Battery LED -

- Flashing blue LED while charging,
- Solid blue LED when not charging (while plugged in) or discharging (while unplugged)
- Flashing orange LED when battery is low (< 25%, less than 1-hour operating time remaining).

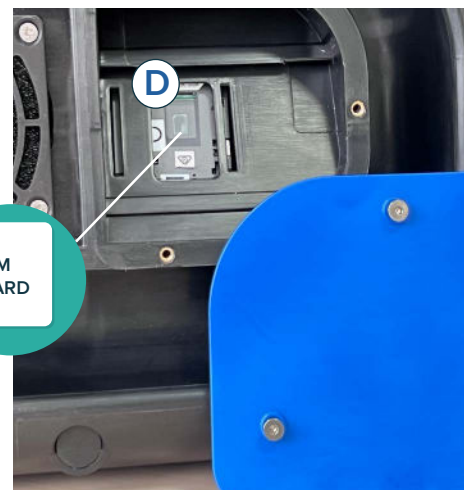
Power LED

- Solid blue LED when powered on
- Flashing orange LED when in standby mode.



Input/Output Ports

- A. USB 3.0 Port
- B. USB 2.0 Port (x2)
- C. LAN Port




SIM CARD

- D. SIM card slot for LTE/4G modem

Figure 3 Back of Trackit Solo

3.2 Setting up the Trackit Solo

- Position the Trackit Solo on a solid, sturdy surface, off the ground (e.g. a coffee table).
- Unwrap the power cord fully and plug it in to a power source.
- Fully extend the camera pole and position the camera and Trackit Solo so that the patient is in view of the camera.

	The Trackit Solo power cable serves as the supply mains disconnect device. When connected to a mains power outlet, the Solo should be positioned so that the power plug is easily accessible. The Trackit Solo can be isolated from the mains supply by unplugging the power cable.
---	--

3.2.1 Switching On & Off

To activate the Trackit Solo, push and quickly release the Power Button. The display will come on in a few seconds.

To put the Trackit Solo in Standby mode, push and quickly release the Power Button. To exit Standby push and quickly release the Power Button again.



To turn the Trackit Solo off Press the Windows Button or the Windows start menu (on the touch screen) and press “Shutdown”.

NOTE:	When the system is locked using the iEEG / Stratus EEG Acquisition “lock screen”, the Windows button and Windows menu are disabled. This prevents the patient from inadvertently turning off the system.
NOTE:	Avoid using the Power Button to turn off the tablet—this form of hardware shutdown is intended to be a means of recovery from lockups, and not as normal operation. Should the Solo lockup, press and hold the power button for 4 seconds to initiate a hard reset.

3.2.2 Connecting an EEG Amplifier

Bluetooth

The Lifelines EEG amplifier will need to be paired to the Trackit Solo in order to connect over bluetooth. Use the Windows Bluetooth settings to add a new Bluetooth device and follow the instructions in the EEG amplifier’s user manual on how to pair the amplifier. Once paired, the EEG software will be able to connect to the amplifier.

USB

To connect the EEG Amplifier to the Trackit Solo via a cable, use the USB cable supplied with the EEG amplifier. Connect the cable to the amplifier and plug the USB connector into one of the three USB connectors on the back of the Solo.

	Do not connect any external equipment to the Trackit Solo if the EEG amplifier is connected to the Solo via a USB cable.
---	---

3.2.3 Connectivity

Networking

The Trackit Solo is supplied with three methods of network and internet connectivity, namely:

- Wireless networking (802.11ac WLAN)
- Wired network (1000Mbps LAN)
- LTE / 4G Mobile connectivity (see Section 4).

Device Connectivity

The Trackit Solo offers three USB ports for device connectivity; 1 x USB3.0 port and 2 x USB2.0 ports. The USB3.0 port can be used to connect an HDMI monitor to the device, using a USB3.0-HDMI adapter (not included).



Do not connect any external equipment to the Trackit Solo if the EEG amplifier is connected to the Solo via a USB cable.

3.2.4 Screen Brightness & Control



The screen brightness can be controlled using the up and down arrows on the right side of the screen.

The screen can be turned off by pressing the “Display Off” button at the bottom of the screen (see Figure 2).

The screen can be turned on by briefly pressing the “Display Off” button or the power button.

Note: When turning off the screen for a long period of time (overnight) ensure the Trackit Solo is plugged into an AC power outlet.

3.2.5 Camera operation

The camera should be configured with the preferred EEG application.

Extend the camera pole to its full height and ensure the patient is within view of the camera.

Note: the camera can rotate 90 degrees left and right and tilt up and down.

When carrying or transporting the Trackit Solo retract the camera pole back down first.

3.2.6 Battery Operation and Charging

The Trackit Solo uses a 90Wh battery which provides approximately 3 hours of battery operation. Keep the Trackit Solo plugged in to an AC power source to ensure that the battery does not discharge during a recording.

The Trackit Solo requires approximately 6 hours to fully recharge the battery.

The Battery LED on the left of the screen provides an indication of the charging state.

LED Colour	Status
Blue (Flashing)	Battery Charging
Blue (Solid)	Fully charged (when plugged into an AC Power source) Discharging (when unplugged from an AC Power source)
Orange (Solid)	Battery is low (< 25%, less than 1-hour operating time remaining).
Red (Flashing)	Charging stopped due to battery over-temperature.

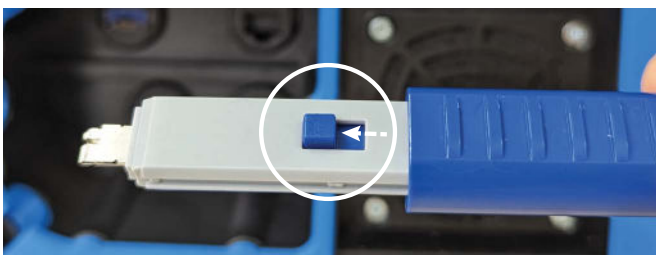
If the charging stops due to over temperature, then check that the Trackit Solo is not near a heat source or in direct sunlight and check that the air vents are not blocked. Move the Trackit Solo to a cooler location.

3.2.7 Ports Locks

The Trackit Solo is supplied with port locks for the USB ports and the RJ45 port. These can be used to prevent the patient or unauthorised persons from tampering with the Trackit Solo and connecting unauthorised devices. Three USB port locks, one RJ45 port lock and a removal key are provided.

How to Use the Port Lock Key

To expose the key header, slide the cover until you hear a click.



1. Press the button forward to put the key into Insert Mode before engaging or releasing the port lock.



2. Insert the key into the port lock.



3. Pull the button back to engage the port lock. The port lock can now be removed.

Port Lock Installation

USB Port Locks



Insert the USB Port Lock by hand by pressing inwards with your fingers.

RJ45 Port Lock

Insertion



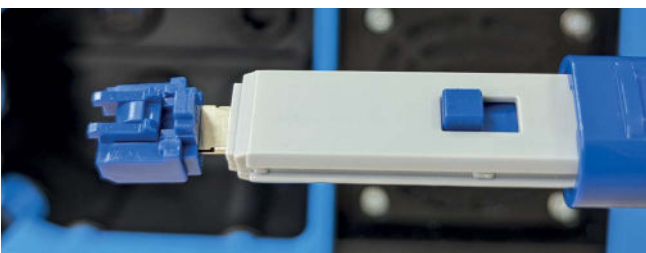
The RJ45 port lock can only be installed while in the unlocked position. Insert by holding the sides so that it does not go into the locked position during installation.

Note: In case the lock is in the locked position, use the Lock Key to unlock it. Insert the key, slide the button back and holding the port lock, pull the key back until it's in the unlocked position. (See STEP 1, on previous page)



Fit the RJ45 Port Lock into the port (as shown, left) and press the front part of the lock until it clicks into place.

Removal



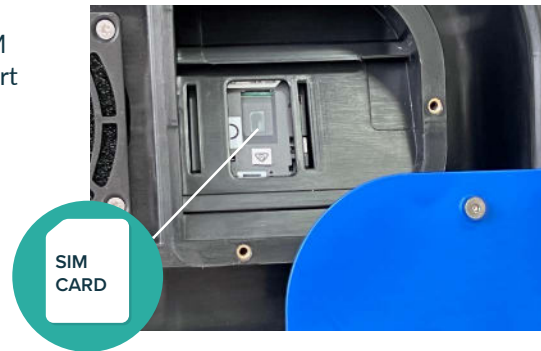
Follow the steps shown on the previous page, then, once the port lock is removed from its port, release the lock from the key by pressing the button forward.

4 LTE / 4G Mobile connectivity

4.1 SIM card

The Trackit Solo uses an LTE/4G modem to provide mobile data connectivity. The modem uses a nano-SIM card. Access to the SIM card is provided on the rear of the Solo, under the blue cover. Insert the SIM card as follows:

- Remove the cover by unscrewing the 3 x Torx screws using a T10 Torx driver (provided).
- Slide the SIM card upwards into the SIM card slot (gold contacts face towards the Solo)
- Replace the cover and refit the 3 x Torx screws.

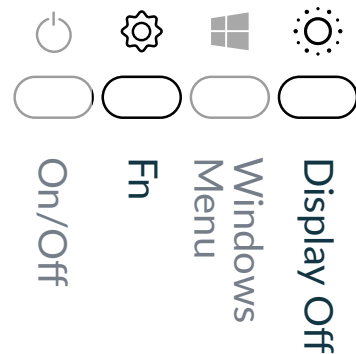


4.2 Activating / Deactivating LTE

The LTE (mobile data) connectivity should be enabled in the operating system when mobile data is required.

Note: When activated, the Mobile data connection takes priority over the Wifi or wired network connection. If WiFi or wired network connection is required, the LTE modem should be disabled first

Hold down the Function "Fn" Button while pressing the "Display On/Off" button to enable and disable the LTE Modem.



The LTE modem can also be enabled and disabled by double clicking on the LTE Modem icon (right) on the Windows Desktop.



4.3 Web User Interface (UI)

The LTE Modem uses a web User Interface (UI) to manage and monitor the mobile data network activity. When the LTE Modem is enabled, the web UI can be accessed from the Chrome browser on the Solo, via the URL <http://my.usb> or <http://192.168.1.1>. The Web UI allows the user to access device information, including Internet status/sessions and modem/network specifications as well as device settings.

The Web UI home page is shown in Figure 4. Click the arrow in the bottom-right corner of a panel to access pages with further information and options.

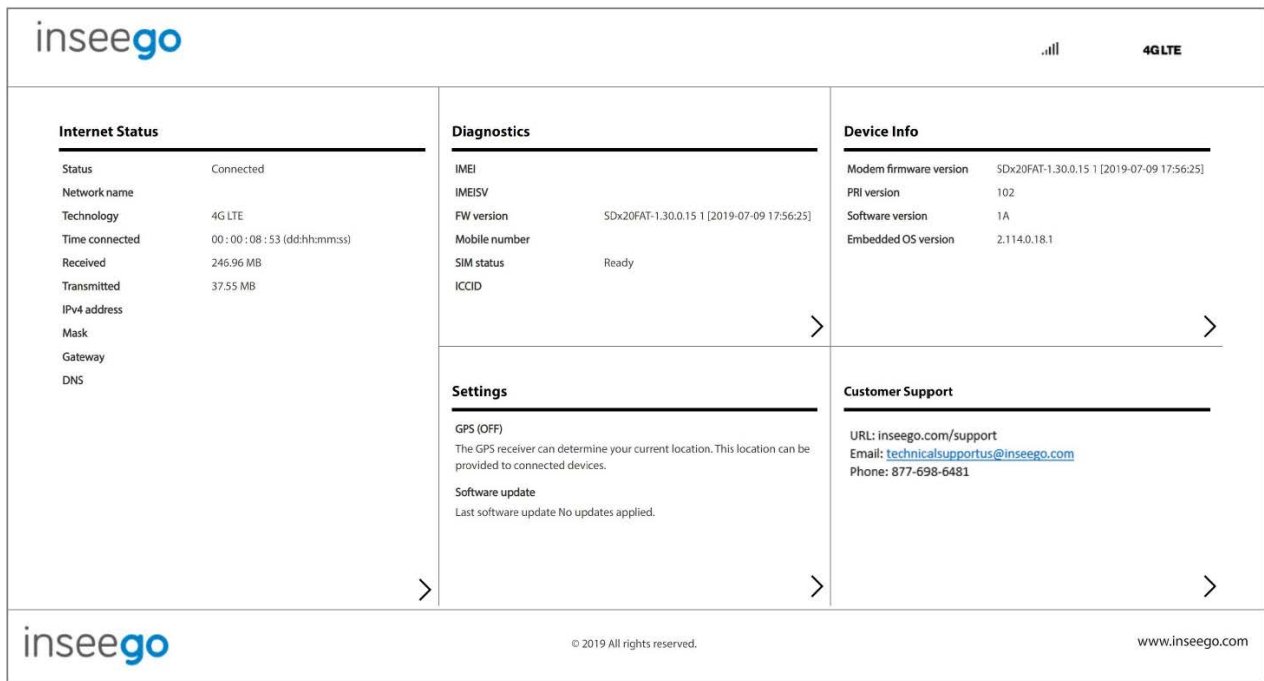


Figure 4: LTE Modem Web User Interface

Appendix 1: Trackit Solo Specifications

Overview

CPU	Intel® Core™ i7-1165G7, 4-Core, up to 4.7 GHz
RAM	16 GB
Storage	512GB Flash
Operating System	Windows 10 Enterprise
Display	10.1" LED-backlight, high-brightness (800 nits) capacitive touch screen
Display Resolution	1920 x 1200
Controls	1 power button, 3 function buttons, 2 brightness control buttons.
Indicators	1 x Battery indicator 1 x Power Indicator
I/O Ports	1 x USB 3.0 2 x USB 2.0 1 x RJ45 Ethernet
Speaker	Built in Speaker
Battery Pack	8000mAh Li-ion battery.

Power Input

AC Input	100 – 240 VAC, 50 – 60Hz
I/P Amps	1.5A
Wattage	60W

Safety

Dielectric Withstand Voltage	4000VAC
Touch Current	20µA max.
Earth Leakage Current	300µA max. NC/SFC
Means of Protection	2 x MOPP
Earth Protection	Class II, with functional earth (FE)

Networking & Wireless

Ethernet	1000Mbps
WLAN	Wi-Fi 802.11ax; 2.4GHz/ 5GHz dual band

LTE / 4G

Model	Inseego MC800
Chipset	QUALCOMM® SDX20
Technology	LTE CAT 18, 480 Mbps LTE Max Throughput
Bands	B1/B2/B3/B4/B5/B7/B12/B13/B14/B17/B18/B20/B28/B29/B30/B66 HSPA+/UMTS: B1/B2/B4/B5/B8
SIM	4FF (Nano SIM)
Approvals	FCC (US), ISED (CAN), CE (EU), RCM (AUS), RSM (NZ), PTCRB; GCF

BLUETOOTH

Standard	v4.0 low energy and v2.0, v2.1 wireless technologies
TX Output Power	9.8dBm
Rx Sensitivity	-86 dBm

Camera (Lifelines TrackitCam)

Maximum Resolution	1920 x 1080P, 2.0 Megapixel
Night vision	IR LED x 10, 650nm IR wavelength
Audio	Single channel digital microphone
Swivel Tilt mount	180° swivel, 170° tilt,
Extension Pole	700mm from the base

Mechanical and Environmental

Weight	5.5kg
Dimensions	414.5mm x 325.6mm x 181.1mm.
Operating temperature	-10°C - 45°C *During battery charging: -10°C - 30°C
Storage temperature	-20°C to 60°C
Humidity	0% to 90% non-condensing

Classification

Degree of protection against electrical shock:	No patient-applied parts, no accessible metalwork
--	---

Type of protection against electrical shock:	Class II device
--	-----------------






Degree of protection against harmful ingress of water:	Ordinary (no protection).
--	---------------------------

Mode of operation:	Continuous.
--------------------	-------------

Degree of safety of application in the presence of a flammable anaesthetic mixture with air or with oxygen or nitrous oxide:	Not suitable
--	--------------

Appendix 2: EMC Compliance

This section contains specific information regarding the device's EMC compliance.

	The use of accessories, transducers and cables other than those specified, with the exception of transducers and cables sold by the manufacturer of the equipment as replacement parts for internal components, may result in increased emissions or decreased immunity of the equipment.
	Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided here.
	The equipment or system should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, the equipment or system should be observed to verify normal operation in the configuration in which it will be used.
	Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Trackit Solo, including cables specified by Lifelines Ltd. Otherwise, degradation of the performance of this equipment could result.
	When in close proximity to the Trackit Solo, do not use mobile phones, transmitters, power transformers, motors, or other equipment that generates magnetic fields.

Recommended separation distance between portable and mobile RF communications equipment and the Trackit Solo.

The Trackit Solo is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Trackit Solo can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Trackit Solo as recommended below, according to the maximum output power of the communications equipment.

If any electromagnetic interference is encountered, the patient and equipment should move to an area without interference. In any case, the electromagnetic interference does not pose any risks to the patient, as the Trackit Solo is non-invasive equipment that does not affect the patient.

Rated maximum output power of transmitter	Separation distance according to frequency of transmitter		
	150 kHz to 80 MHz $d = 1.17 \sqrt{P}$	80 MHz to 800 MHz $d = 1.17 \sqrt{P}$	800 MHz to 2.5 GHz $d = 2.33 \sqrt{P}$
W			
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Version History

V1.0 (November 2023)

- First release

trackit SOLO

Lifelines Ltd,
1 Tannery House, Send, Woking GU23 7EF
United Kingdom
Telephone +44 (0)1483 224 245
www.lifelinesneuro.com
sales@lifelinesneuro.com



Imagine EEG Anywhere