

# Technical Sheets

# SUNIT



### SUNIT FX INTEL i7, 14 CORES for Demanding Duties

- 12th Gen. Wide-temp. Intel® i7 12800HE Alder Lake
- 6 Performance Cores, Maximum Turbo Frequency 4.6 GHz
- 8 Efficient Cores, Maximum Turbo Frequency 3.5 GHz
- Intel HD Quad-graphic
- Tough Smart-Tech CPU-Server
- Conformal-coated Electronics
- Multi-Screen option
- 2 x CAN, D-IO's, An-In's
- Dual-Band Wi-Fi, BT 5.0, 4G / LTE
- Accurate 72-channels 3D GNSS, ADR
- 3D-Gyro
- Stereo-Lines, Audio-I/O, Microphone-In
- Screen-Audio
- Vehicles; VSS, Gearshift sense, FMS
- Intelligent Power-Moding
- 9 ... 36V / Core-Pwr. monitorly



### EAGLE-CLASS HIGH-EFFICIENT FOR EXTREMELY DEMANDING SERVICE



**SUNIT-FX.** New 12th Gen. Intel Alder Lake 6 Core Computer with extreme capacity.  
**SUNIT-FX** is designed for Applications that call for powerful graphic processing, High-speed Arithmetic, Multi-HMI as Mission Critical and ANPR.  
**SUNIT-FX** unites Efficiency, Sharpness, Precision and Alertness in compact package.  
 It is Discretely mountable for versatile purposes and serves reliably multiple operations.  
**Demanding Duties** asks progressive solutions and Intelligent applications claiming computer as a trusted server on day-around service. Quad-graphic and Rapid Storage technology with up-to 4 Stand-Alone HMI (Sunit Digital-LVDS, FDP-Link HD Display Connectors, WiFi) is efficient and cost-effective solution to exploit shared PC technologies.  
**Inbuilt IoT-computer** for CAN-Bus, sensors and data-I/O's are ease-to-reach by Client applications. Rapid 72-channel 3D-GPS with G-sensor and ADR ensures accurate positioning and serves dual GPS-interface for Multitask-Applications  
**SUNIT Computers** build on firm and light-weighted geometry designed cast-aluminium mechanics and conformal coated Solid-electronics.  
**SUNIT Wide-view Touch-screens** delivers safe and reliable Monitor for versatile HMI.

Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



Certified facility.



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### Technical Sheet

<b>CPU</b>	12th Gen. Intel® Core™ i7 12800HE AlderLake 6 Performance Cores 4.6 GHz / 8 Efficient Cores 3.5 GHz	
<b>RAM</b>	Dual Channel 32GB (Option 64GB) DDR5	
<b>STORAGE</b>	480 GB Wide-temp. Optional 480 GB—2TB. NVMe	
<b>O/S</b>	WIN11 Enterprise LTSC	
<b>GRAPHICS</b>	Intel® Iris Xe / UHD Graphics.	
<b>VIDEO</b>	Intel® Quick Sync Video	
<b>AUDIO</b>	3 x: 1. Audio on Screens (incl. HDMI-interface) 2. Intel® High Definition Audio Line-Out. Wake-UP signal for External Amplifier 3. 2 x 30W Speaker lines, Stereo	
<b>MICROPHONE</b>	Microphone-In	
<b>SCREEN INTERFACE</b>	2 Sunit FDP-Link Display Connector, Display Port (option)	
<b>ETHERNET</b>	Intel® 2.5Gb Ethernet RJ45 Connect.	
<b>USB</b>	3 x USB 3.0. Possible to extend with Sunit In-Vehicle USB HUB	
<b>SIM-SLOT</b>	Dual-SIM: 2 x Front Feed	
<b>MODEM</b>	4G: LTE, DC-HSPA+, UMTS, EDGE, GPRS, Voice, Echo Arithmetic, eCall, VoLTE (Option)	
<b>VIDEO-IN</b>	4 x PCI-E Video Decoder (Option) Automatic A/V-standard detection and configuration. NTSC, PAL or AHD	
<b>SERIAL INTERFACE</b>	4x Configurable RS232 / RS485(Termination by SW settings)	
<b>WI-FI</b>	Intel® Dual-Band Wireless (Option) IEEE WLAN Standard: 802.11abgn, 802.11ac, 802.11d, 802.11e, 802.11i, 802.11h, 802.11w Seamless Roaming: IEEE 802.11b, 802.11g, 802.11a/b/g, 802.11a/b/g/n, 802.11ac Antenna In-Cabin: 2,4GHz / 1,5dBi. Antenna Outdoor for On-the-Go connections: 2,4GHz / 5dBi	
<b>BLUETOOTH</b>	Bluetooth 5.0	
<b>IGN-SENSE</b>	Intelligent 4-state Power Management. 9V ... 36V. API-Readable via T-LINK	
<b>CAN</b>	2 x High-Speed CAN: SAE J1939, ISO 11783	
<b>DIGITAL-IN</b>	4 x High-Active D-In: · 10V ... 36V, Logic-H +11V, Internal Pull-Downs API Read via T-LINK · Pre-start / Wake-Up of System on Arctic conditions 3 x Low-Active Di-In: · 0V ... 36V, Logic-H +5V, Internal Pull-Ups · VSS (Vehicle Speed Sensor) API Read via T-LINK · VDS (Vehicle Direction-Sense); Gear-Shift	
<b>DIGITAL-OUT</b>	4 x Digital-Out: · Voltage Level due to Power-Input API Re-Write via T-LIN · Short-Circuit and Inductive-Load Protected	
<b>ANALOG-IN</b>	4 x Analog-In: · 1 x 0...50VDC API Read via T-LINK · 3 x 0...10VDC	
<b>ACC.</b>	3-AXIS (X-Y-Z) LOW G Digital Accelerometer. Jolt & Pulse detections. API-Readable via T-LINK.	
<b>GPS / GNSS / GYRO</b>	Rapid 72-Channel 3D GNSS (GPS/Galileo/Glonass), ADR (Automotive Dead Reckoning). Dual-channel Readable; API via T-LINK and Direct-Access on Serial-port	
<b>POWER-IN</b>	9 ... 36 VDC. API-Readable via T-LINK	
<b>BACK-UP</b>	Internal, for Abrupt Power Interrupts. Intelligent Shut Down of Apps and Shut-Off the Unit. <span style="float: right;">@SUNIT OY. All rights reserved. Specifications subject to change without notice</span>	
<b>DIMENSIONS</b>	Universal 1-DIN Sized (163 x 177 x 50) mm. Weight 2.6kg	
<b>CASING &amp; BODY</b>	Geometry-designed impact protective Aluminium Body. High-density Steel cover	
<b>COMPLIANT</b>	ECE 10R-06, FCC, CE, C-Stick WEEE 2002/96/EG, RoHS 2002/95/EC, REACH 2006/121/EC	
<b>OPERATING TEMPERATURE</b>	-40°C to +80°C. 10%~85% rhd	
<b>ENVIRONMENT</b>	-40C ... +85C. Temperature monitored. 0%~90% Relative Humidity	

### SUNIT FMDe2 INTEL i7 4 x 3.0GHz for Intelligence Duties

- 7th Gen. Wide-temp. Intel® i7 7820EQ KabyLake H
- 4 x 3.0GHz
- Intel HD Tri-graphic
- Tough Smart-Tech CPU-Server
- Conformal-coated Electronics
- 3 x Screen Interfaces
- Up to 4 x Stand-alone Video
- 2 x CAN, D-IO's, An-In's
- Dual-Band Wi-Fi, BT4.2, 4G / LTE
- Accurate 72-channels 3D GNSS, ADR
- 3D-Gyro
- Stereo-Lines, Audio-I/O, Microphone-In
- Screen-Audio
- Vehicles; VSS, Gearshift sense, FMS
- Intelligent Power-Moding
- 9 ... 36V / Core-Pwr. monitorly



### EAGLE-CLASS HIGH-EFFICIENT FOR EXTREMELY DEMANDING SERVICE



**SUNIT-FMDe2.** New 7th Gen. Intel KabyLake Quad-Core Computer with extreme capacity. **SUNIT-FMDe2** is designed for Applications that call for powerful graphic processing, High-speed Arithmetic, Multi-HMI as Mission Critical and ANPR. **SUNIT-FMDe2** unites Efficiency, Sharpness, Precision and Alertness in compact package. It is Discretely mountable for versatile purposes and serves reliably multiple operations. Demanding Duties asks progressive solutions and Intelligent applications claiming computer as a trusted server on day-around service. Tri-graphic and Rapid Storage technology with up-to 4 Stand-Alone HMI (2 x Digital-LVDS, Sunit HD Display Connector, WiFi) is efficient and cost-effective solution to exploit shared PC technologies. Inbuilt IoT-computer for CAN-Bus, sensors and data-I/O's are ease-to-reach by Client applications. Rapid 72-channel 3D-GPS with G-sensor and ADR ensures accurate positioning and serves dual GPS-interface for Multitask-Applications **SUNIT Computers** build on firm and light-weighted geometry designed cast-aluminium mechanics and conformal coated Solid-electronics. **SUNIT Wide-view Touch-screens** delivers safe and reliable Monitor for versatile HMI.

### Technical Sheet

<b>CPU</b>	7th Gen. Intel® Core™ i7-7820EQ KabyLake-H, 4x3.0GHz(4x3.7GHz), 8MB, DMI3.0 8GT/s.	
<b>RAM</b>	Dual Channel 16GB (Option 16GB) DDR4-2400MHz, 37.5GB/s.	
<b>SYSTEM BUS</b>	3rd Gen. Mobile Intel® HM175 PCH. Intel® Rapid Storage technology, Intel® HD Audio.	
<b>STORAGE</b>	240 GB Wide-temp. Optional 480 GB—1TB. NVMe / SATA SSD.	
<b>O/S</b>	WIN-10 Enterprise LTSC, Win-10 Pro, LINUX	
<b>GRAPHICS</b>	Intel® HD 630 Graphics, 4K Media Codecs, High 3D-Rendering on Low-Power mode	
<b>VIDEO</b>	Intel® Quick Sync Video and Intel® Clear Video HD, 3D-Graphic, 4K Media Codecs	
<b>AUDIO</b>	3 x: 1. Audio on Screens (incl. HDMI-interface) 2. Intel® High Definition Audio Line-Out. Wake-UP signal for External Amplifier 3. 2 x 30W Speaker lines, Stereo	
<b>MICROPHONE</b>	Microphone-In	
<b>SCREEN INTERFACE</b>	Triple Screen: 2 x Sunit Touch Digital-LVDS Displays. Sunit HD Display Connector	
<b>ETHERNET</b>	Intel® I211-AT. Low Power GB-Ethernet Up-to 2.5GbE. 10/100/1000 Base-T. RJ45 Connect.	
<b>USB</b>	3 x USB 3.0	
<b>SIM-SLOT</b>	Dual-SIM: 2 x Front Feed	
<b>MODEM</b>	4G: LTE, DC-HSPA+, UMTS, EDGE, GPRS, Voice, Echo Arithmetic, eCall, VoLTE (Option)	
<b>VIDEO-IN</b>	4 x PCI-E Video Decoder (Option) Automatic A/V-standard detection and configuration. NTSC, PAL	
<b>SERIAL INTERFACE</b>	4x Configurable RS232 / RS485 (Termination by SW settings)	
<b>WI-FI</b>	Intel® Dual-Band Wireless AC-8265, 433Mb/sec. (Option) IEEE WLAN Standard: 802.11abgn, 802.11ac, 802.11d, 802.11e, 802.11i, 802.11h, 802.11n, 802.11ac Seamless Roaming: IEEE 802.11b, 802.11g, 802.11a/b/g, 802.11a/b/g/n, 802.11ac Antenna In-Cabin: 2.4GHz / 1.5dBi. Antenna Outdoor for On-the-Go connections: 2.4GHz / 5dBi	
<b>BLUETOOTH</b>	Bluetooth 4.2 BLE, Low-energy, IPv6 for IoT; WPA2-PSK/AES Standard. Dual-Mode Compliant Standards: IEEE 802.11ac/w Antenna In-Cabin: 2.4GHz / 1.5dBi. Antenna Outdoor for On-the-Go connections: 2.4GHz / 5dBi	
<b>IGN-SENSE</b>	Intelligent 4-state Power Management. 9V ... 36V. API-Readable via T-LINK	
<b>CAN</b>	2 x High-Speed CAN: API Re-Write via T-LINK.	SAE J1939, ISO 11783 and NMEA 2000. FMS-Protocol.
<b>DIGITAL-IN</b>	4 x High-Active D-In: API Read via T-LINK 3 x Low-Active Di-In: API Read via T-LINK	· 10V ... 36V, Logic-H +11V, Internal Pull-Downs · Pre-start / Wake-Up of System on Arctic conditions · 0V ... 36V, Logic-H +5V, Internal Pull-Ups · VSS (Vehicle Speed Sensor) · VDS (Vehicle Direction-Sense); Gear-Shift
<b>DIGITAL-OUT</b>	4 x Digital-Out: API Re-Write via T-LIN	· Voltage Level due to Power-Input · Short-Circuit and Inductive-Load Protected
<b>ANALOG-IN</b>	4 x Analog-In: API Read via T-LINK	· 1 x 0...50VDC · 3 x 0...10VDC
<b>GYRO / ACC.</b>	3-AXIS (X-Y-Z) LOW G Digital Accelerometer. Jolt & Pulse detections. API-Readable via T-LINK.	
<b>GPS / GNSS</b>	Rapid 72-Channel 3D GNSS (GPS/Galileo/Glonass). ADR (Automotive Dead Reckoning). Dual-channel Readable; API via T-LINK and Direct-Access on Serial-port	
<b>POWER-IN</b>	9 ... 36 VDC. API-Readable via T-LINK	
<b>BACK-UP</b>	Internal, Non-Explosive Back-Up Battery NiMH (Nickel-Metal-Hybrid) for Abrupt Power Interruptions. Intelligent Shut Down of Applications and Shut-Off the Unit. ADR-Powering up-to 1 hr.	
<b>DIMENSIONS</b>	Universal 1-DIN Sized (163 x 177 x 50) mm. Weight 2.6kg	
<b>CASING &amp; BODY</b>	Geometry-designed impact protective Aluminium Body, High-density Steel cover	
<b>COMPLIANT</b>	ECE 10R-06, FCC, CE, C-Stick WEEE 2002/96/EG, RoHS 2002/95/EC, REACH 2006/121/EC	
<b>OPERATING TEMPERATURE</b>	-40°C to +80°C. 10%~85% rhd	
<b>ENVIRONMENT</b>	-40°C ... +85°C. Temperature monitored. 0%~90% Relative Humidity	

Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



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### SUNIT BIKE-ASSIST MAKING PATROL-BIKE INTELLIGENCE

#### SUNIT -FMD

- Intel® i7 7820EQ
- Kabylake H 4 x 3.0GHZ
- Intel HD Tri-graphic
- 1x GigaBit-Ethernet
- 3 x Screen Interfaces
- 1x Video (Option 4 x Video)
- Dual-Band Wi-Fi & BT 4.2,
- 4G / LTE, Dual-SIM
- FM-receiver with DAB+
- Voice-priority control (4-channels)
- Mini-keys for Handlebars.
- 2 x CAN, D-IO's, Analog-In's
- Accurate 72-channels 3D GNSS
- 3D-Gyro
- Vehicles; VSS, Gearshift sense, FMS
- Intelligent Power-Moding
- 9 ... 36V / Core-Power monitority



### TECHNOLOGY MAKING INTELLIGENCE ON PATROL-BIKE



Law Enforcement by Patrol-Bike is having increasing service demands on traffic. Riders are constantly disturbed in their work meanwhile speed accelerates up-to life-threatening numbers. Information's-flow that are continuously incoming by Voice and Image from several sources, disturbs the focus on traffic. Bike-riders duty requires a high level of professionalism and quick decisions in stressful situations.

**SUNIT FQ Bike** is specially tailored computer for Patrol-bike service. In addition, for usual computer with Patrol-required equipments, it includes FM-receiver with DAB+ traffic-messaging for Navigation Applications and Voice-control to select prioritized voices between Navigator, Phone, PC and Tetra. As a full-service on Patrol-Duty, FQ-Bike offers kit for Springly Helmet cable connection, PPT-Statives on Handlebars, Accessory Harness for Tetra radio including Voice priority interface and Sealed Mini-KeyPads.

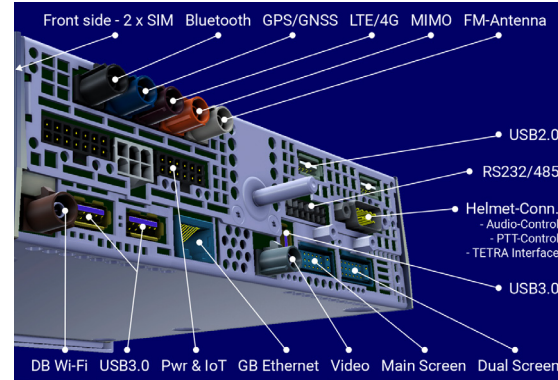


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**SUNIT-FQ Patrol Bike-Assist** is for Law Enforcement an complete solution offering all vital components including cables, antenna, as well as CPU and HMI devices. The aim is to simplify manipulations in duty and create a safe working environment for the authority. The Platform base on OAA-Computing and the Client application have control of all User-related priorities & functions.

#### SUNIT FOX



ANPR Camera

#### SUNIT Mini-Scout



Traffic Surveillance Camera

#### SUNIT-Screen, Waterproof



SUNIT-Keyboard, Waterproof

#### Waterproof 5-button Keypad w. LED-signals



#### Wired



Alternative PTT-Statives

#### B.T.



#### Wired & B.T.



SUNIT Helmet Cable-Jack



Helmet w. Headset & Mic.

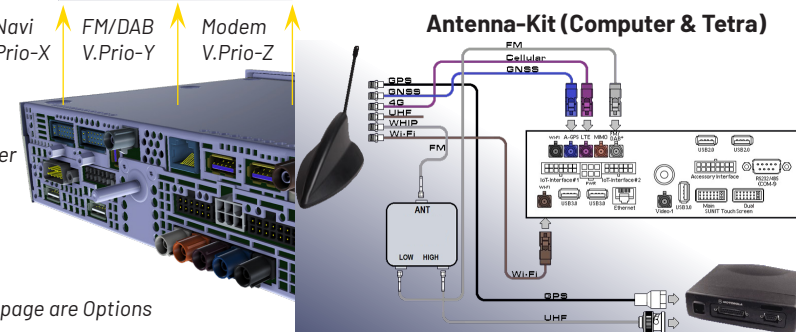
Pocket-Radio w. B.T.

#### Trunked Radio



#### Selected Voice

SUNIT-Computer



Some of devices on this page are Options

## SUNIT IVIA 5G



### COMPACT. POWERFUL. RELIABLE. FOR SECURE COMMUNICATION BETWEEN AUTHORITIES



#### SMART VEHICLE INTEGRATION

Start directly from the vehicle ignition and control external devices through Sunit Digi I/O connections.



#### FLEXIBLE DISPLAY COMPATIBILITY

Pair with Sunit FX displays for smooth switching between Windows and Android environments.



#### SUNIT OSD CONTROLS

On-screen display enables fast and reliable controls for network connectivity. Displays active network, signal strength and link priority. Enables control of connected in-vehicle devices.



#### SEAMLESS MISSION-CRITICAL CONNECTIVITY

Combine 5G Mission Critical LTE with Tetra radio integration for secure and reliable communication in any situation.



#### COMPACT ALL-IN-ONE DESIGN

Streamline vehicle interiors with a single unit that merges multiple functions, reducing the need for separate devices.

### SECURE NETWORK AND DEVICE MANAGEMENT IN ONE SYSTEM

IVIA 5G integrates secure network connectivity with in-vehicle device control. Automatic network prioritization ensures uninterrupted field communication. Built for emergency and authority vehicles.



## SUNIT IVIA 5G

- i.MX8M-PLUS
- 4x A53 @ 1.8 GHz
- GNSS
- 5G prim, 5G MIMO
- Ethernet & WLAN
- Sunit-T LINK Vehicle-interface Application
- 1x CAN, 4 x Programmable Digital-I/O's
- 1x USB-A 2.0
- 1x USB-C 3.0
- Audio line in, line out, Helmet mic in, Helmet headphone out, Monophone or external mic and speaker
- Screen switch FX-CPU - Ivia 5G
- Internal SD card slot



**SUNIT Ivia 5G** is a standalone device designed for secure communication between authorities.

**SUNIT Ivia 5G** unites Efficiency, Sharpness, Precision and Alertness in a compact package. It is Discretely mountable for versatile purposes and serves reliably in multiple operations.

**SUNIT Ivia 5G** features a switchable output source, allowing users to choose between Sunit FX CPU and Ivia Android (FPD-Link 3). Additionally, it offers integration with the Tetra 1 device for optimal performance and compatibility.

**SUNIT Ivia 5G** Audio connectivity is designed for officers in vehicles and motorcycles, providing clear and reliable communication in various environments.

Demanding Duties asks progressive solutions and Intelligent applications claiming computer as a trusted server on dayaround service.

SUNIT Computers build on firm and light-weighted geometry designed cast-aluminium mechanics and conformal coated Solid-electronics.

**SUNIT Wide-view Touch-screens** delivers safe and reliable Monitor for versatile HMI.

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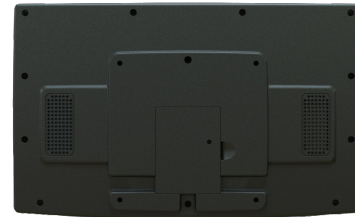
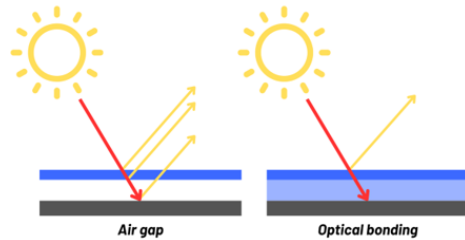
## Technical Sheet

<b>CPU</b>	NXP i.MX8M-PLUS: 4x Cortex A53 @ 1.8 GHz, 1x Cortex M7 @ 800 MHz
<b>RAM</b>	Up to 8GB LPDDR4 @ 2000 MHz
<b>STORAGE</b>	Up to 128GB eMMC
<b>O/S</b>	ANDROID Version 15
<b>GRAPHICS</b>	NPU 2.3 TOPS
<b>VIDEO</b>	FPD-Link I/O for Sunit FX CPU or Stand-alone unit with FX-displays
<b>AUDIO</b>	Line in, Line out, Helmet mic in, Helmet headphone out, Monophone or external mic and speaker
<b>SCREEN INTERFACE</b>	e 1x FDP-Link Display Connector OUT, 1x FDP-Link Display Connector IN
<b>ETHERNET</b>	2x 10/100/1000 Mbit/s Ethernet
<b>USB</b>	1x USB-type C / 1x USB 2.0
<b>MODEM</b>	5G, M.2 slot, Supports 4x4 MIMO, Fakra connector
<b>SIM-SLOT</b>	2x SIM
<b>SERIAL INTERFACE</b>	D9 Configurable RS232
<b>WI.FI</b>	Wi-Fi 802.11a/b/g/n/ac/ax
<b>BLUETOOTH</b>	Bluetooth 5.4/ BLE
<b>IGN-SENSE</b>	Intelligent 4-state Power Management. 9V ... 36V. API-Readable via T-LINK
<b>CAN</b>	1x CAN
<b>DIGITAL-IN / DIGITAL-OUT</b>	4x programmable D-I/O <b>Digital-In:</b> High-Active Di-In: API Read via T-LINK Low-Active Di-In: <b>Digital-Out:</b> API Re-Write via T-LINK
<b>GPS/GNSS/ GYRO</b>	GNSS
<b>POWER-IN</b>	9.0V ... 36.0V
<b>BACK-UP</b>	Internal, for Abrupt Power Interrupts. Intelligent Shut Down of Apps and Shut-Off the Unit.
<b>DIMENSIONS</b>	(W x L x H): 165 x 170 x 35 mm
<b>CASING &amp; BODY</b>	Geometry-designed impact protective Aluminium Body, High-density Steel cover
<b>COMPLIANT</b>	ECE 10R-06, FCC, CE, C-Stick, ISO-16750 WEEE 2002/96/EG, RoHS 2002/95/EC, REACH 2006/121/EC
<b>ENVIRONMENT</b>	-40°C ... +75°C. 0% -90% Relative Humidity

The product meets all the Vehicle, Machinery and Industrial Environmental criteria's worldwide and is Quality tested by member of International Laboratory Accreditation Cooperation (ILAC)

### SUNIT FX21

- 21,5" display
- Optimized for in-vehicle use
- Certified for automotive environments
- Full HD resolution (1920x1080)
- Anti-glare and anti-reflective coatings
- Wide viewing angle
- Optical bonded PCAP touch panel
- Multi-touch support up to 5 fingers
- High-performance integrated speakers
- VESA mount compatible
- CAN bus support
- Designed and manufactured in Finland



### SUNIT TOUCH-SCREENS ARE PURPOSE-BUILT FOR INDUSTRIAL AND FLEET OPERATIONS, ENSURING RELIABLE 24/7 PERFORMANCE.

Sunit FX Displays offer excellent visibility, wide viewing angles, and fast responsiveness which is a crucial feature for any commercial HMI application. The displays stand out with a smooth casing, crack-resistant screen surface, and a robust yet flexible structure. Thanks to their smart and compact design, they can be easily placed and integrated into any environment according to user preferences.

### ENHANCED CLARITY AND PRECISION WITH OPTICAL BONDED PCAP TOUCH

The Sunit FX21 display uses an optical bonded PCAP touch panel that improves visibility, reduces glare by eliminating internal reflections, and enhances brightness and clarity. As illustrated in the image, a traditional display with an air gap (left) reflects more ambient light, which can cause glare and reduce readability, especially in bright or outdoor environments. In contrast, optical bonding (right) minimizes these reflections, allowing more light to pass through directly to the user's eyes. Its precise multi-touch functionality makes it ideal for demanding environments like in-vehicle systems.

Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



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### IMPROVED READABILITY WITH ANTI-GLARE AND ANTIREFLECTIVE COATINGS

The Sunit FX21 display features anti-glare and antireflective coatings that reduce external glare and internal reflections even further, ensuring clear readability even in bright or outdoor conditions, this makes the display an ideal choice for in-vehicle and outdoor use.



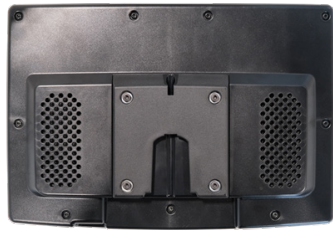
### Technical Sheet

TYPE	21.5" TFT
RESOLUTION	FullHD (16:9), 1920x1080
RESPONSE TIME	20 MS
COLORS	16.7 M
COMMENTS	LED Backlight
DIMENSION	529 x 328 x 45 mm
SUITABLE CPU	Sunit FX CPU's / Sunit F-serial CPU's with adapter card / Sunit FX-Gear with HDMI/Display port
DATA COMMUNICATION	Full Digital Interface, FPD-Link III
USER INTERFACE	Capacitive multi-touch screen
HIGH VISIBILITY	Horizontal +89° / -89° Vertical +89° / -89°
BRIGHTNESS ADJUSTMENT	Auto Ambient controlled / Manual
CABLES	1 m / 1,5 m / 4,5 m / 6 m
HOUSING	PC/ABS - C2950 V0+UV
COMPLIANT	ECE 10R-06, ISO-16750, FCC CE
OPERATING TEMPERATURE	-40°C to +80°C, 10%~85% rhd
ENVIRONMENT	-40°C ... +85°C, Temperature monitored, 0%~90% Relative Humidity
CHEMICAL RESISTANCE	Acetone, Methylene chloride, Methyl ethyl ketone, Isopropyl alcohol, Hexane, Turpentine, Mineralspirits, Unleaded Gasoline, Diesel Fuel, Motor Oil, Transmission Fluid, Antifreeze

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### SUNIT FX12 HD RESOLUTION

- 12" display
- Optimized for in-vehicle use
- Certified for automotive environments
- Full HD resolution (1920x1080)
- Anti-glare and anti-reflective coatings
- Wide viewing angle
- Optical bonded PCAP touch panel
- Multi-touch supports up to 5 fingers
- VESA mount compatible
- CAN bus support
- Designed and manufactured in Finland



The Sunit FX12 display combines powerful performance with versatile functionality, making it ideal for control applications. Its 12-inch screen offers a perfect balance between compact design and ample viewing area, enabling efficient operation and clear visibility of critical data. Built for demanding environments, the FX12 ensures reliable performance with advanced features such as optical bonding, anti-glare coating, and multi-touch capability for precise and responsive control.



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### Technical Sheet

TYPE	11.6" TFT
RESOLUTION	FullHD (16:9), 1920x1080
RESPONSE TIME	25 MS
COLORS	16.7 M
COMMENTS	High brightness LED Backlight
WEIGHT	1.4 kg
DIMENSION	293 x 203 x 36 mm
SUITABLE CPU	Sunit FMDe2, Sunit FX-Gear with HDMI/Display port
DATA COMMUNICATON	Full Digital Interface, FPD-Link III
USB	2 x 2.0
USER INTERFACE	Capacitive multi-touch screen
GLASS TREATMENTS	AR / AF
HIGH VISIBILITY	Horizontal +88° / -88° Vertical +88° / -88°
BRIGHTNESS ADJUSTMENT	Auto Ambient controlled / Manual
CABLES	1,0 m / 1,5m / 4,5 m /6m
ATTACHMENT COMPATIBILITY	Sunit Slider (Dashboard mount) / VESA 75 suitable
HOUSING	PC/ABS - C2950 V0+UV
COMPLIANT	ECE 10R-06, ISO-16750, FCC CE
OPERATING TEMPERATURE	-40°C to +80°C, 10%~85% rhd
ENVIRONMENT	-40°C ... +85°C, Temperature monitored, 0%~90% Relative Humidity
CHEMICAL RESISTANCE	Acetone, Methylene chloride, Methyl ethyl ketone, Isopropyl alcohol, Hexane, Turpentine, Mineralspirits, Unleaded Gasoline, Diesel Fuel, Motor Oil, Transmission Fluid, Antifreeze



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### FEATURES

1 external CAN up to 1Mbit/s

Sunit OSD (On-Screen-Display) is tailored feature to increase usability and safety of the operator. FX12 Display includes CAN-bus connection which can be utilized to connect Display to external devices, such as bluelights, to control or to display information. Camera interface that supports composite video (CVBS) standards: PAL (B, D, G, H, I), NTSC (M)



### SUNIT FX7

- 7" display
- Optimized for motorbike in-vehicle use
- Certified for automotive environments
- Resolution 800 (RGB) x 480
- Anti-glare and anti-reflective coatings
- Wide viewing angle
- Optical bonded PCAP touch panel
- Multi-touch support up to 5 fingers
- High-performance integrated speakers
- VESA mount compatible
- CAN bus support
- Designed and manufactured in Finland
- IP67 for protection against dust and temporary immersion in water up to 1 meter deep.

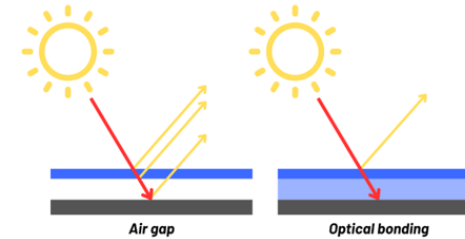


### SUNIT TOUCH-SCREENS ARE PURPOSE-BUILT FOR INDUSTRIAL AND FLEET OPERATIONS, ENSURING RELIABLE 24/7 PERFORMANCE.

Sunit FX Displays offer excellent visibility, wide viewing angles, and fast responsiveness which is a crucial feature for any commercial HMI application. The displays stand out with a smooth casing, crack-resistant screen surface, and a robust yet flexible structure. Thanks to their smart and compact design, they can be easily placed and integrated into any environment according to user preferences.

### ENHANCED CLARITY AND PRECISION WITH OPTICAL BONDED PCAP TOUCH

The Sunit FX7 display uses an optical bonded PCAP touch panel that improves visibility, reduces glare by eliminating internal reflections, and enhances brightness and clarity. As illustrated in the image, a traditional display with an air gap (left) reflects more ambient light, which can cause glare and reduce readability, especially in bright or outdoor environments. In contrast, optical bonding (right) minimizes these reflections, allowing more light to pass through directly to the user's eyes. Its precise multi-touch functionality makes it ideal for demanding environments like in-vehicle systems.



### IMPROVED READABILITY WITH ANTI-GLARE AND ANTIREFLECTIVE COATINGS

The Sunit FX7 display features anti-glare and antireflective coatings that reduce external glare and internal reflections even further, ensuring clear readability even in bright or outdoor conditions, this makes the display an ideal choice for in-vehicle and outdoor use.

### Technical Sheet

TYPE	7" TFT
RESOLUTION	800 (RGB) x 480
RESPONSE TIME	25 MS
COLORS	16.7 M
COMMENTS	High brightness LED Backlight
WEIGHT	0,6 kg
DIMENSION	192 x 140 x 40 mm
SUITABLE CPU	Sunit FMDe2, Sunit FX-Gear with HDMI/Display port
DATA COMMUNICATON	Full Digital Interface, LVDS
USER INTERFACE	Capacitive multi-touch screen
GLASS TREATMENTS	AR / AF
HIGH VISIBILITY	Horizontal +85° / -85° Vertical +85° / -85°
BRIGHTNESS ADJUSTMENT	Auto Ambient controlled / Manual
CABLES	1 m / 1,5m / 4,5 m / 6m
ATTACHMENT COMPATIBILITY	Sunit Slider (Dashboard mount) / VESA 75 suitable
HOUSING	PC/ABS - C2950 V0+UV
COMPLIANT	ECE 10R-06, ISO-16750, FCC CE
OPERATING TEMPERATURE	-40°C to +80°C, 10%~85% rhd
ENVIRONMENT	-40°C ... +85°C, Temperature monitored, 0%~90% Relative Humidity
CHEMICAL RESISTANCE	Acetone, Methylene chloride, Methyl ethyl ketone, Isopropyl alcohol, Hexane, Turpentine, Mineralspirits, Unleaded Gasoline, Diesel Fuel, Motor Oil, Transmission Fluid, Antifreeze



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### FOR SUNIT FX7 OUTDOOR

IP67  
Cable 3 m

Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.

CERTIFIED  
ISO 9001



Certified facility.



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### SUNIT AT7 QUICK-START 4 X 1.6GHz ALL-IN-ONE PANEL-PC

- Open Architecture Computing
- Powerful Intel Atom x7-E3950, Apollo Lake
- 4 x 1,6 GHz. Quick-start Core-CPU
- 4GB DDR3L RAM
- 2D and 3D Graphics
- Touch Interface
- HD-Audio Speakers
- Wide temperature
- 72-Channel GNSS
- 4G/LTE
- Integrated 3D Gyro
- IGN-Start
- Intelligent Power-modng
- 9 ... 36V / Core-Pwr. monitoriy
- CAN, USB, LAN, Serial Interfaces.



**SUNIT-AT7 All-in-One Panel-PC** for Industry and Fleet Applications. Compact design comprises wide amount of features for Industrial IoT-Utilizations. Strong casing and Industry classified Conformal coated electronics ensures a long In-Field Service life on demanding environments.

Graphics-Accelerator and sharp TFT-LCD Display with Auto-Ambient controlled LED-Backlight offers user-friendly Screen-interface. Powerful Ultra Low-Voltage processor with Smart-speed technology offers optimized Processor capacity for all Applications. Light Weight combined with Tough casing offers selectable installations in all Demanding Duties. Purpose-designed and conformal coated electronics ensures long In-Service time even on harshest conditions. Inbuild SIM-Slot with 4G / LTE Modem and 72-channel GNSS offers excellent support for LBS-Applications. 3-axis Accelerometer, High-Speed CAN and Digital I/O's offers expansions for IoT-Applications. 2 x Speakers offers excellent Audio features.



I/O-Box for connections of devices makes Hidden placement possible.

- Small size: 20mm x 45mm x 60mm. Cable Length 1m.
- 2 x USB2.0
- Serial (RS232 / 485)
- CAN
- Digital I/O's

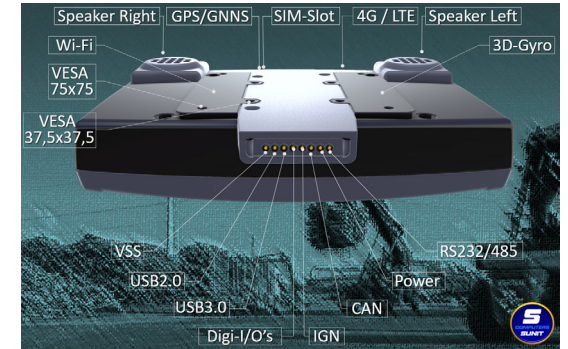


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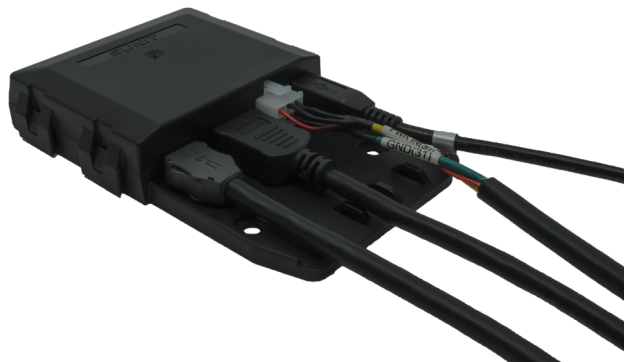
### Technical Sheet

<b>CPU</b>	Intel Atom x7-E3950, Apollo Lake, 4 x 1,6 GHz. Burst 2.0 GHz. 2 MB L2 Cache. Industrial Extended Temperature. T-LINK: ATSAM4E, 120 MHz
<b>RAM</b>	4 GB DDR3L. Up to 1866MT/s. T-LINK: 128 kB
<b>STORAGE</b>	64GB SSD. Option 128GB / 256GB
<b>O/S</b>	Windows 10, Windows 10 IoT (Enterprise LTSB / Enterprise E5 CBB / Enterprise E3 CB). Windows 7.
<b>GRAPHICS</b>	Intel® HD Graphics 505, 500 MHz, 2GB
<b>VIDEO</b>	Intel® Quick Sync Video and Intel® Clear Video HD. 3D-Graphic, 4K Media Codecs.
<b>AUDIO</b>	2 x Internal speakers. HD-Audio.
<b>SCREEN TYPE</b>	High bright Digital-LVDS Display. W-VGA 800x480. 262 000 colours. EMI-Shielded. LED Backlight. Auto Ambient / Manual controlled brightness. Resistive touch, non-glare.
<b>USB</b>	1 x USB 3.0 & 1 x USB 2.0
<b>SIM-SLOT</b>	1 x SIM
<b>WI-FI</b>	Intel® Dual-Band Wireless AC-3165, 433Mb/sec. Data Link Protocol: 802.11a/b/g/n/ac. Standards: IEEE 802.11a/b/d/g/i, IEEE 802.1x.
<b>IGN-SENSE</b>	Automotive IGN-Sense. Monitor of Core-Power level
<b>CAN</b>	1 x High-Speed CAN / SAE J1939, ISO 11783 and NMEA 2000 Standard Data Bus
<b>DIGITAL-IN</b>	1 x Digital-In: 0V ... 36V, Logic-H +5V, Internal Pull-Ups
<b>DIGITAL-OUT</b>	3 x Digital-Out. Power-level due to Power-In
<b>GYRO</b>	MPU-6500 Six-Axis (Gyro + Accelerometer) MEMS Motion Tracking™ Device
<b>GNSS</b>	U-blox CAM-M8Q / High-sensitive 72-channel u-blox M8 engine. GPS, QZSS, GLONASS, BeiDou. Embedded wideband and omnidirectional GNSS antenna.
<b>TELE COMM</b>	4G LTE Quectel EC-25
<b>POWER</b>	9 ... 36VDC.
<b>POWER-MODING</b>	Intelligent 4-state Power Moding system / Manually ON/OFF
<b>DIMENSIONS</b>	(w)165 x (h)126 x (d)37mm. Weight 1,5kg
<b>CASING</b>	PC/ABS / Cylcoloy-2950 / V0+UV / 76701.
<b>COMPLIANT</b>	ECE 10R-06, ISO-16750, FCC CE WEEE 2002/96/EG, RoHS 2002/95/EC, REACH 2006/12/EC
<b>ENVIRONMENT</b>	-40C ... +85C. Temperature monitored. 0%-90% Relative Humidity.

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### SUNIT FX-GEAR DUAL-SCREENING FOR TABLETS

- Can be connected to DisplayPort or HDMI port.
- USB connection transfers
  - Touch
  - Audio
  - USB-ports available in display
- Self-Powered 9V.....36V
- Conformal-coated electronics
- Strain reliefs for harnesses
- For Harsh Conditions
- Impact resist casing



Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.

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### SUNIT USB-GEAR 4G/LTE MODEM SELF-POWERED 4G/LTE MODEM WITH GNSS FOR INDUSTRY & FLEET

- 4 x USB2.0
- 1x RS-232/485 with Configurable Termination
- 4G Modem CAT4 150/50 Mbs
- GPS / GNSS
- Antenna connectors GNSS/LTE/MIMO
- Alarm button input
- Secure chip for customer purposes (Option)
- USB 2.0
- For Harsh Conditions
- Self Powered
- High-Powered Downstream for rough devices
- Compatible with Windows and Linux
- Conformal-Coated Electronics
- Casing: PC/ABS - V0+UV
- Strain-reliefs for Harnesses



#### COMPLIANT

ECE 10R-06, ISO-16750, FCC CE  
WEEE 2002/96/EG  
RoHS 2002/95/EC,  
REACH 2006/121/EC

#### ENVIRONMENT

-40C ... +85C.  
0%-90% Relative Humidity.

The product meets all the Vehicle, Machinery and Industrial Environmental criteria's and is Quality tested by member of International Laboratory Accreditation Cooperation (ILAC)

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Specifications subject to change without notice

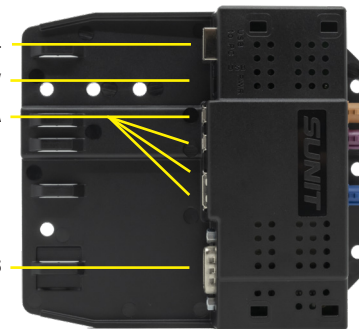
Designed for demanding use, Wide-temperature, Self-Powered USB2.0 HUB supporting Downstream ports by 2.5A and is Over-Current, Polarity and Short-Circuit protected. The Box have Bottom-plate with Cable-Locking clamps for safe connections even on vibration-circumstances. Conformal-coated Electronics and PC/ABS-casing with V0+UV resistances makes safe and reliable product in harshest environments. Allows use of high-power consumption devices with 1.0 ... 1.5A Downstream powering's. All connectors are lockable for reliable data-connections. Compatible with Windows / Android and Linux.

USB2.0 UPSTREAM IGN-SIGNAL

V POWER IN 9...36V

USB2.0 DOWNSTEAM 1.0A

D9-CONNECTOR RS232 / 485



MIMO  
LTE/4G

GPS/GNSS

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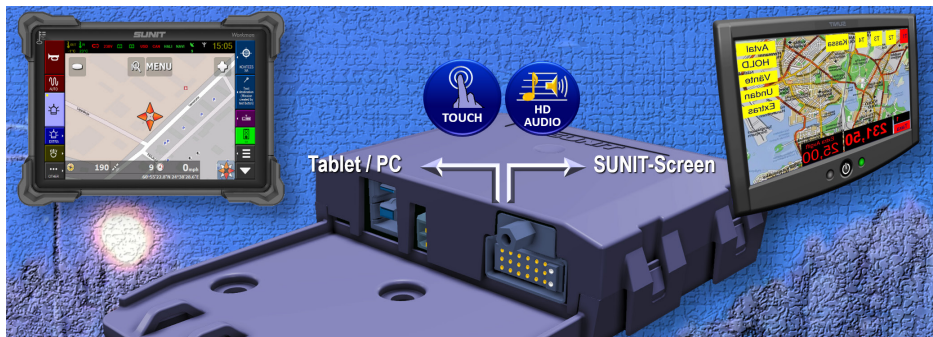
### SUNIT LVDS-GEARS DUAL-SCREENING FOR TABLETS

- Plug and play
- Transfer of:
  - Graphic
  - Voice
  - Touch
- Self-Powered 9V ... 36V
- Conformal-coated Electronics
- Strain-reliefs for Harnesses
- For Harsh Conditions
- Impact-resist Casing
- Tablet-Connections:
  - USB3.0
  - DisplayPort / HDMI



### CONNECT SUNIT-SCREEN ON TABLET AS DUAL-SCREEN

**SUNIT LVDS-Gear** is a Industrial Dual-Screen Converter for connection of SUNIT-Screen to third-part Tablet / PC thru USB3.0 or Display Port Interface.  
It is fitted with High-value components rated for extreme industrial environments.  
Design follows the Industrial ISO-16750 Heavy Duty Standards.  
SUNIT-Screen serves as a Standalone Dual Screen sharing Laptop / Tablet / PC for Multiple Users.  
Applicable on Fleets, Industry and Infra-structure.



Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



Certified facility.

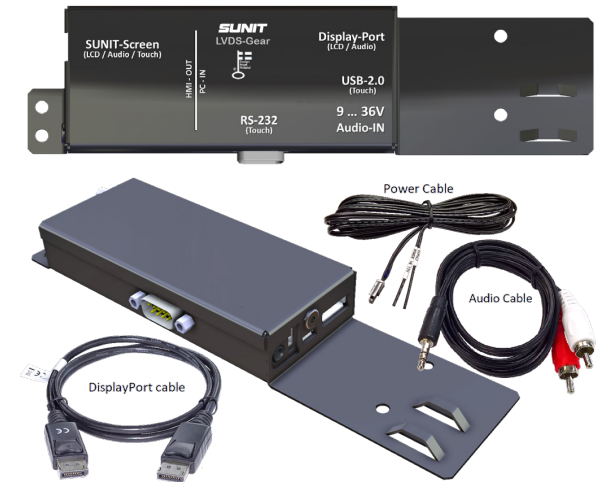


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### LVDS-Gear Display Port / HDMI

- 54 x 25 x 199mm
- 0,1kg
- Aluminium Casing, V0/UVL Resistant

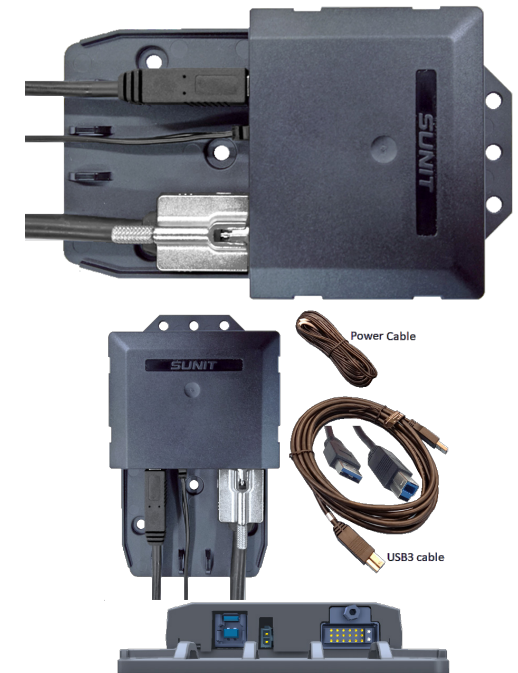
### The Kit:



### SUNIT LVDS-Gear USB3.0

- 90 x 24 x 145mm
- 0,08kg
- PC/ABS Casing, V0/UVL Resistant

### The Kit:



### SUNIT USB 2.0 HUB SELF-POWERED FOR INDUSTRY & FLEET

- 3 x USB2.0 Downstream
- 1 x RS-232/485
- USB-2.0 Upstream
- For Harsh Conditions
- Self Powered
- High-Powered Downstream  
For Rough devices  
For Charging's
- Conformal-Coated Elect-  
ronics
- Casing: PC/ABS - V0+UV
- 122 x 138 x 25 mm
- 9 ... 36V



#### INDUSTRIAL GRADE FOR EXTREMELY TOUGH CONDITIONS

##### COMPLIANT

ECE 10R-06, ISO-16750, FCC CE  
WEEE 2002/96/EG  
RoHS 2002/95/EC,  
REACH 2006/121/EC

##### ENVIRONMENT

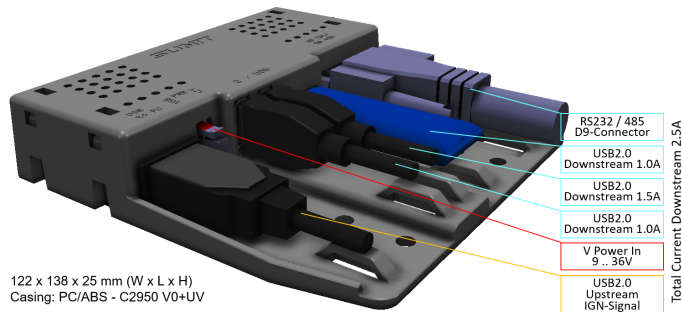
-40C ... +85C.  
0%-90% Relative Humidity.

The product meets all the Vehicle, Machinery and Industrial Environmental criteria's and is Qualify tested by member of International Laboratory Accreditation Cooperation (ILAC)

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Specifications subject to change without notice

Designed for demanding use, Wide-temperature, Self-Powe-  
red USB2.0 HUB supporting Downstream ports by 2.5A and is  
Over-Current, Polarity and Short-Circuit protected.  
The Box have Bottom-plate with Cable-Locking clamps for safe  
connections even on vibration-circumstances.  
Conformal-coated Electronics and PC/ABS-casing with V0+UV  
resistances makes safe and reliable product in harshest envi-  
ronments.  
Allows use of high power consumption devices with 1.0 ... 1.5A  
Downstream powering's.  
All connectors are lockable for reliable data-connections.  
Compatible with Windows XP / 7 / 10 and Linux.



CERTIFIED  
ISO 9001



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Production.

Sunit products meet international road  
vehicle and environmental standards,  
including ISO 16750, UNECE 10R-05 0020,  
RoHS, REACH, and WEEE.

Certified facility.

### SUNIT USB 3.0 HUB SELF-POWERED FOR INDUSTRY & FLEET

- 4 x USB3.0 Downstream
- 3 x USB2.0 Downstream
- Giga-Bit USB-3.0 Upstream
- For Harsh Conditions
- Self Powered
- High-Powered Downstream  
For Rough devices  
For Charging's
- Conformal-Coated Elect-  
ronics
- Casing: PC/ABS - V0+UV
- 122 x 138 x 25 mm
- 9 ... 36V



#### INDUSTRIAL GRADE FOR EXTREMELY TOUGH CONDITIONS

##### COMPLIANT

ECE 10R-06, ISO-16750, FCC CE  
WEEE 2002/96/EG  
RoHS 2002/95/EC,  
REACH 2006/121/EC

##### ENVIRONMENT

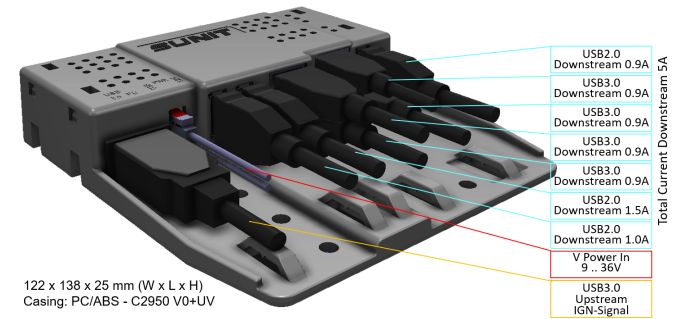
-40C ... +85C.  
0%-90% Relative Humidity.

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Specifications subject to change without notice

Designed for demanding use, Wide-temperature, Self-Powe-  
red USB3.0 HUB supporting Downstream ports by 5A and is  
Over-Current, Polarity and Short-Circuit protected.  
The Box have Bottom-plate with Cable-Locking clamps for safe  
connections even on vibration-circumstances.  
Conformal-coated Electronics and PC/ABS-casing with V0+UV  
resistances makes safe and reliable product in harshest envi-  
ronments.  
Allows use of high power consumption devices with 0.9 ... 1.5A  
Downstream powering's.  
All connectors are lockable for reliable data-connections.  
Compatible with Windows XP / 7 / 10 and Linux.



CERTIFIED  
ISO 9001



This Product Is Manufactured In A Certified  
Facility. The Product Itself Is Not Certified.

Sunit products meet international road  
vehicle and environmental standards,  
including ISO 16750, UNECE 10R-05 0020,  
RoHS, REACH, and WEEE.

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### SUNIT GATE-GEAR POE+ INJECTOR FOR INDUSTRY, FLEET & INFRA

- Plug and play PoE+ network devices
- Automatic detection of PoE-devices
- Integrated Power-Supply, applies power to a PoE (up to 15 W) and PoE+ (up to 30 W) per device
- 2 x Gigabit Ethernet port (1 x Upstream and 1 x Downstream)
- 4 x PoE+ Ethernet port
- Metal enclosure
- Conformal-coated Electronics
- Net-connection up to 100 meters
- For wide operating temperature range of -40 to 75 °C
- LED indicators confirm PoE and network connectivity
- Individual PoE+ I/O Control from User-application
- Self-Powered



### POE+ INJECTOR FOR INDUSTRY FLEET AND INFRA

**SUNIT Gate-Gear** PoE+ Injector is a Industrial Gigabit PoE+ unit with high-value components rated for extreme industrial environments. It supports Power-access moreover 100m enabling flexible positionings of Access points. It supports Power over Ethernet for a PoE, PoE+, or high power PoE+ devices. Thru Serial Interface Windows application control each PoE+ Interface and PoE+ Extenders sends on request the Status-reports. Dual-wiring 9 ... 36V power inputs with current protections support up-to 120W Down streams. LED-Signals for each Stream indicates an Application status individually for each Ethernet-lines. Applicable on Fleets, Industry and Infra-structure.

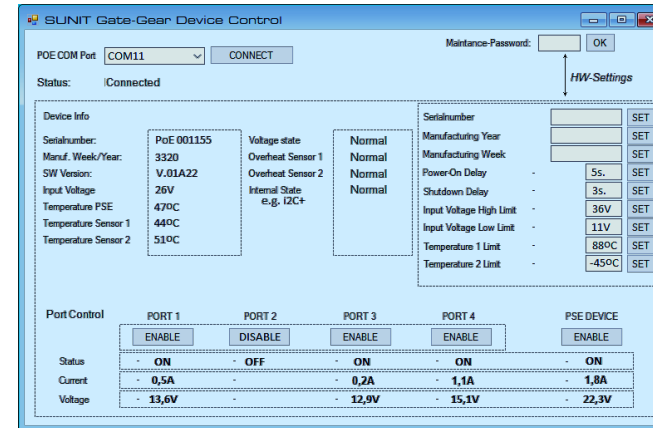


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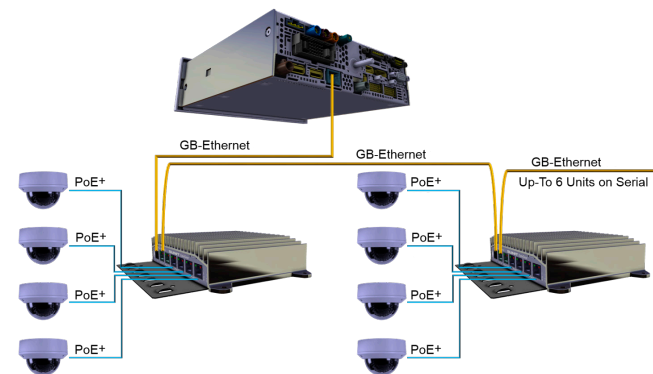
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**Gate-Gear Device Control HMI**  
HMI for Computer / server.  
It monitors status of devices and have HMI for device ON/OFF-Managements.

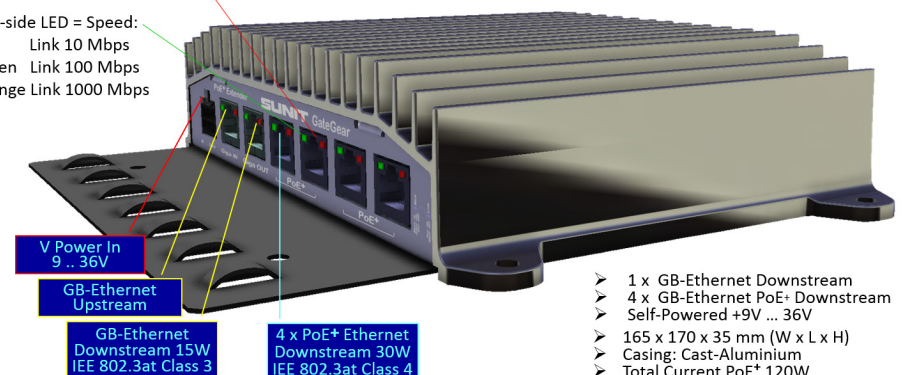
Suitable for Windows 10 O/S.



**PoE-Network**  
SUNIT Gate-Gear PoE+ Injector includes Dual GB-Ethernet port. Therefore, it is possible to Chain-utilize the Network with several Gate-Gear's in line.

Right-side LED = Traffic ON/OFF

Left-side LED = Speed:  
 OFF Link 10 Mbps  
 Green Link 100 Mbps  
 Orange Link 1000 Mbps



- 1 x GB-Ethernet Downstream
- 4 x GB-Ethernet PoE+ Downstream
- Self-Powered +9V ... 36V
- 165 x 170 x 35 mm (W x L x H)
- Casing: Cast-Aluminium
- Total Current PoE+ 120W

### SUNIT KEYBOARD LIGHTED & SEALED FOR HARSH USE

SUNIT Lighted and fully Sealed Keyboards for challenging environments where typical office grade peripherals will not survive. Our rugged keyboards have excellent Key-feel, are Lighted and size is optimal for desk and mobile applications. Excellent Key-Feel enables easy type writing.

#### KEYBOARD FOR INDUSTRY FLEET AND MEDICS

- Fully Sealed
- For Harsh Conditions
- LED-Lighted, adjustable
- For Fleet and Industry
- USB-Connected
- Touchpad
- 373 x 138 x 23 mm
- 0,68kg
- Excellent Tactile Key-Feel
- White-coloured for Med's



Semi-Rugged

#### FULLY RUGGED COMPOSITE KEYBOARD

- Ruggedized industrial keyboard
- Robust ABS Polycarbonate casing
- Industrial silicone Key-Enclosure
- Tactile key feel, travel 1.0mm
- 91-KEYS
- IP68 water proof sealed
- NVIS-Compliant Backlit
- Multi-touch pad (mouse and scroll)
- VESA 75 and AMPS mounting provisions
- 297 x 192 x 22 mm, 0,77kg
- Cable length: Standard 2.0m
- Applications: Medical, Military, Industrial, Fleet



Rugged

### SUNIT KEYBOARD LIGHTED & SEALED FOR HARSH USE

#### SILICONE KEYBOARD WITH TOUCHPAD

- Built-in touchpad
- LED-Lighted, adjustable
- Easy Clean, washable
- Fully sealed, IP68 Waterproof, Dust Proof
- Disinfectable
- Excellent tactile feedback
- Quiet - noiseless keystroke
- USB Interface
- Ease of Use - Touchpad is responsive to latex gloved fingers
- 343 x 228 x 13 mm
- 1.15 kg
- Cable length 1.85 meter
- Operating temperature -20°C ~ +65°C



- Built-in touchpad
- LED-Lighted, adjustable
- Easy Clean, washable
- Fully sealed, IP68 Waterproof, Dust Proof
- Disinfectable
- Excellent tactile feedback
- Quiet - noiseless keystroke
- USB Interface
- Ease of Use - Touchpad is responsive to latex gloved fingers
- 345 x 135 x 12 mm
- 0.75 kg
- Cable length 1.4 meter
- Operating temperature -20°C ~ +65°C



### COMMERCIAL KEYBOARDS BY SUNIT QUALITY PROCESS

- Integrated Touchpad
- Low-profile tactile keys
- Membrane key switches
- Space-saving Design
- Tactile key feel, key travel 1.5mm
- 227 x 289 x 27 mm
- 720g
- USB-Connected
- Cable length: Standard 2.0m

Semi-Rugged



- Compact design
- Easy typing
- Low-profile tactile keys
- Membrane key switches
- Space-saving Design
- Tactile key feel, key travel 1.5mm
- 291 x 154 x 29 mm
- 580g
- USB-Connected
- Cable length: Standard 2.0m

ACK-595U



### COMMERCIAL BY SUNIT-DURABILITY

The Commercial product selected for our product family base on long-term user experience and undergoes demanding annual quality and reliability tests.

As a guarantee for a long service life and based on quality control, we undertake modifications and additions on product structure required by the purpose of utility, focusing especially on electronics on wide-temperature harsh environments.

### SUNIT MOUSE-PAD

#### GLIDEPOINT BY SUNIT QUALITY PROCESS

- Glidepoint Plane Pad
- Industrial
- Sealed
- Multi-touch touchpad (mouse and scroll)
- 86 x 67 x 13 mm , 0,05kg
- Cable length: Standard 1.8m
- Applications: Medical, Military, Industrial, Fleet



### SUNIT S-PAD EMBEDDED-CONNECTED KEYPAD

- Single-Button
- Digital-I/O -Connected
- Pull-Down active
- Sealed
- Cover against Impacts
- Easy to Hidden-Install
- Small-size 15 x 25 x 10mm



Single-button Keypad for e.g. Alarm -functions in Commercial Service's as Bus, Taxi. Is widely used e.g. on Taxi cars thanks to Invisible placements.

Extremely reliable due to users working-safety demands.

### SUNIT F-PAD FINGERTIP-SIGNED KEYPAD

- Programmable
- 4-buttons
- Fingertip-Signs
- USB-Connected
- Fingertip design for dark use
- Sealed
- Cover against Impacts
- Easy to Install
- Small-size 30 x 45 x 15mm



USB-Connected, braille coded Keypad for invisible use. Programmable for Application purposes.

### SUNIT VT-PAD / LITE SUNIT Velocity Tracking control units

#### SUNIT VT-PAD

- Hand-Held Keypad
- USB-Connected
- Programmable Lighted Buttons
- 4x Function Buttons
- Up/Down Buttons
- One-Hand Design
- Stative for FIX-Mount
- 0,1 kg. PC/ABS/V0+UV



#### SUNIT VT-PAD LITE

- Hand-Held Keypad
- USB-Connected
- Lighted Buttons
- One-Hand Design
- Stative for FIX-Mount
- 0,1 kg. PC/ABS/V0+UV



### SUNIT Velocity Tracking measurement control units

**Sunit VT-PAD** and **VT-PAD Lite** are USB-connected Handheld Keypads for quick interactions. Lighted and Programmable buttons enhances variable application use. Fixed Mounting-bracket and on-click locking allows appropriate placement and comfortable use in vehicles.

**Sunit VT-PAD's** are used with SUNIT Patrol Assist Average Speed Measurement application. Adding number of VT-PAD units enables to track multiple vehicles simultaneously. Main function is to track travelled time and length via easy-use mechanical ON/OFF switches. Programmable functions keys are available for quick application use.

*Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.*



Certified facility.



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### SUNIT 24-KEYPAD PROGRAMMABLE HANDHELD KEYPAD

- Hand-Held Keypad
- USB-Connected
- Programmable
- Lighted Buttons
- 14 x Single-function Buttons
- 4 x Dual-function Buttons
- 1 x Quad-function Button
- ON/OFF LED
- One-Hand Design
- Stative for FIX-Mount
- 0,1 kg. PC/ABS/V0+UV



**SUNIT 24-button USB-connected Handheld Keypad** for quick-touch service. It is Lighted and Programmable for Application purposes. Fixed Mounting-bracket enables appropriate placement and easy to on-locking.

### SUNIT SURFACE-PAD PROGRAMMABLE INDOOR OUTDOOR SURFACE MOUNT KEYPAD

- Sealed 5-button Pad
- Fixed, Surface Mount
- LED-Lighted
- 2 x LED for Signage
- Silicone-Buttons
- Functions-Programmable
- For Bikes, Vehicles, Industry
- USB-Connected
- For Harsh Conditions
  - Indoor
  - Outdoor with IP-Cables
- 9 x D63 mm
- 0,1kg



**Flush-mounted, small sized finger-touch designed** for placements where invisibly or close-to-finger touch is required, like BIKE-bars, walls. Programmable for Application purposes. Sealed harness for Outdoor use.

*Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.*



*This Product Is Manufactured In A Certified Facility. The Product Itself Is Not Certified.*



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## SUNIT CABIN CAMERA 1MP IR USB

IR USB CAMERA FOR INDOOR

- **Image Sensor:** 1/2.9" CMOS, 1MP resolution
- **Frame Rate:** Real-time 25 fps (CIF: 1-4 road)
- **Lens:** 2.8 mm with 90° field of view
- **Output Resolution:** 1920 × 720
- **Video Output:** USB 2.0 (with 2.0 m cable)
- **Plug and Play:** Drive-free installation
- **Image Formats:** YUY / MJPEG
- **Automatic Functions:** White balance, AGC, backlight compensation
- **Power Supply:** DC 5V ±10%, 100mA ±10%
- **IR Cut Filter:** Built-in IRCUT for better color accuracy



The Sunit Cabin Camera is a compact and efficient video solution designed for clear, real-time image capture. Its 1-megapixel CMOS sensor and wide 90° lens provide sharp, detailed visuals, while automatic image adjustments ensure optimal performance in varying light conditions. With USB 2.0 connectivity, plug-and-play setup, and compatibility across major systems, it's an ideal choice for cabin or vehicle monitoring applications.

### Technical Sheet

PARAMETER	SPECIFICATION
MODEL	H0-003
IMAGE DEVICE	1/2.9 CMOS
EFFECTIVE PIXELS	1 million pixels
PHOTOSENSITIVE AREA	3.0UM x3.0UM
IMAGE FRAME RATE	CIF: 1-4 road for 25 frames in real-time
PLUG AND PLAY	Support drive-free use
INTERFACE TYPE	USB2.0 (come with 2.0m USB line)
SUPPORT SYSTEM	Win7, Win8, WinXP SP2, Vista drive-free; WinXP SP1 supports Android and Apple system
VIDEO MONITOR 525 VIDICON VIDEO OUT	USB2.0
AGC	Automobile
NOISE-SIGNAL RATIO	Greater than 48dB
WHITE BALANCE	Automobile
BACKLIGHT COMPENSATION	Voluntarily
PICTURE OUTPUT FORMAT	YUY/MJPEG
IMAGE OUTPUT SIZE	1920x720
CURRENT	100mA ±10%
VOLTAGE	The DC flow is 5V ± 10%
CAMERA LENS	2.8 mm in black and white
FIELD OF VIEW ANGLE	90°
IRCUT	belt IRCUT

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**SUNIT MINI-SCOUT**  
SMALL-SIZE WATERPROOF CAMERA



**SEALED FULL-HD USB-POWERED SMALL-SIZED CAMERA  
WHERE VISIBILITY IS SENSITIVE**

**SUNIT Mini-Scout All-In-Weather Camera offers camera technology connecting high imaging quality for Videoing In- and Outdoors.**

Strong Polycarbonate PC-ABS Casing makes SUNIT Mini-Scout camera suitable for wide range of mounting objects, as Car indoor, Bikes, Vessels, Safety monitoring and Industry.

White or Black colour Casing extends the suitable placements for sensitive visibilities.

High sensitivity and Full-HD picture quality, Using the latest AR0331 CMOS sensor technology for visible-light and near-infrared regions. Additionally, the AR0331 sensor features Wide Dynamic Range (WDR) technology, which ensures clear and detailed images in both bright and dark areas, making it ideal for challenging lighting environments. Stable and Universal stand-slot, and solid design permits 24/7 use in all conditions.



**Camera Colour alternatives,  
Black / White**

**Technical Sheet**

PARAMETER	SPECIFICATION
SENSOR	AR0331 CMOS image sensor. Excellent low illumination quality
IMAGE DEVICE	1/3"-type
EFFECTIVE PIXELS	3MP, 1920(H)x1080(V) / FULL-HD
FPS	30fps at full resolution
AEC	Automatic exposure control Support
AEB	Automatic White Balance Support
AGC	Automatic Gain Control Support
FOCUS	Fixed Focus
SHUTER TYPE	Electronic rolling shutter
SN RATIO (SIGNAL-TO-NOISE)	39dB
MINI ILLUMINATION	0.05lux
SHUTTER	Electronic rolling shutter
POWER SUPPLY	USB BUS POWER
PLUG & PLAY	USC (USB-Video-Compliant) USB3
SYNC SYSTEM	Internal
O/S	Linux, Android, Mac and Windows
DIMENSIONS	35 x 35 x 40 mm (W x H x D)
WEIGHT	Approx. 60 g
STATIVE	1/4 20 / UNC
CASING	PC / ABS Polycarbonate

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**For Outdoor:  
USB-3 Extend Harness, Sealed**

Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



Certified facility.



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### SUNIT SECURE SUPERSENSE WATERPROOF CAMERA



#### HIGH-SPEED SUPERSENSE ALL-WEATHER 30X-CAMERA FOR SECURITY, TRAFFIC SURVEILLANCE AND REMOTE MONITORING

**SUNIT-Secure Supersense Camera connecting high imaging quality with proven SUNIT Computer technology for Demanding Duties.** Full HD picture quality, Using the latest Sony FCB-EV7520A technology, SUNIT-Secure delivers images even in the toughest lighting conditions. Presumption for High-quality Video in Surveillance world is camera which captures a High-Speed moving image with optical zoom and back-illuminating technology. Stable stand, built-in image stabilizer, De-fog feature, Auto IR-cut Filter with industrial conformal-coated electronics and solid design permits 24/7 use in all conditions. All mechanical vibration is eliminated with built-in image stabilizer, Stable Zoom and Advanced noise reduction technology producing absolute clear imaging. **SUNIT-Camera** control Application for Pre-settings enables quick one-touch controlled swap between environmental influences, as daylight conditions and high sensitivity mode on Nigh-time. Application offers interfaces for Third-party Applications for Client-customized Utilisations. Strict designed Cable harness makes clean and secure installations.



Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.

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### Technical Sheet

PARAMETER	SPECIFICATION
IMAGE DEVICE	Full-HD 1/2.8-type CMOS
EFFECTIVE PIXELS	Approx. 2.13 Megapixels
LENS	36x Optical zoom. f =4.3 mm (wide) to 129 mm (tele), F1.6 to F4.7. D = 41.7 mm
DIGITAL ZOOM	12x (360x with optical zoom)
ZOOM SPEED	Optical WIDE/Optical TELE: 2.5 sec (Focus Tracking OFF), 5.0 sec (Focus Tracking ON) Optical WIDE/Digital TELE: 7.0 sec (29.97Hz/59.94Hz mode), 7.4 sec (25p/50p mode) Digital WIDE/Digital TELE: 2.1 sec (29.97Hz/59.94Hz mode), 2.5 sec (25p/50p mode) Infinity to near: 1.1s
FOCUS SYSTEM	Auto (Sensitivity: normal, low), One-push AF, Manual, Infinity, Interval AF, Zoom Trigger AF, Near Limit, Focus Compensation with IR lighting
MINIMUM OBJECT DISTANCE	10 mm (wide end) to 1200 mm (tele end)
NOISE REDUCTION	Advanced, 6 steps (2DNR 3DNR separate mode)
ELECTRONIC SHUTTER	1/1 s to 1/10,000 s, 22 steps
AE (AFTER-EFFECT) CONTROL	Full Auto, Shutter Priority, Iris Priority, Manual, Exposure Compensation, Slow AE, Back Light Compensation, Slow Shutter - Auto/Manual, Min shutter limit
WHITE BALANCE	Auto, ATW, Indoor, Outdoor, Outdoor Auto, Sodium Vapor Lamp Fix/Auto/Outdoor Auto), One-push, Manual
GAIN	Auto/Manual/Max gain limit/High Sensitivity (0 to 50.0 dB, 28 steps)
WIDE DYNAMIC RANGE	0 (DOL method, 90dB 1080p60, 130dB 1080p30)
BACKLIGHT COMPENSATION	YES
CHARACTER GENERATOR	20 characters/line, max. 11 lines
MOTION DETECTION	Yes with 4 zones. (Alarm ON / OFF)
PICTURE EFFECT	Defog (Auto, 3 levels), Visibility enhancer, Black & White, E-Flip, Mirror, Black level, gamma, Sat/Hue Adjust, HLC, contrast
EXPOSURE CONTROL	From -10.5 to +10.5 dB (1.5 dB steps)
MINIMUM ILLUMINATION	Minimum 0.0008lx to 1lx (due to Shutter, ICR & H-Sens. -settings). Typical 100lx to 100.000lx.
VIDEO OUTPUT	HD: Digital (Y/Cb/Cr 4:2:2) Dual/single LVDS
CONTROL SERIAL INTERFACE	VISCA protocol (TTL/CMOS), 9.6 Kbps, 19.2 Kbps, 38.4 Kbps, 115.2 Kbps Stop bit 1/2 bit
USER MEMORY	16 BYTES
DIMENSIONS	50.0 x 60.0 x 89.7 mm (W x H x D)
WEIGHT	Approx. 260 g

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#### Camera Features

Auto ICR, Wide Dynamic Range(Wide-D)(Auto mode),Visibility Enhancer, Defog, Noise Reduction, Image Stabilization, Stable Zoom, Spot Light Avoidance, Digital Output, Motion Detection, Spherical Privacy Zone Masking, Alarm, Slow AE Response, Picture Effects Black & White (Monochrome Image), Picture Freeze, Electronic-Flip (E-FLIP), Mirror image, Slow Shutter, Flicker-less, Temperature Readout, Title Display, (20 characters / line, max. 11 lines), Camera Mode Display

#### Camera-Settings by SUNIT Touch-Screen (Sample-Menus)



#### SUNIT Handheld Keypad for Quick-Control of Camera



### SUNIT R IR-REVERSING CAMERA

- Image device: 1/3" CMOS
- Picture pixels: 640 x 480
- Signal system: NTSC/ PAL
- Horizontal definition: 420 TV lines
- Minimum illumination: 0.2 lux
- S/N ratio: Better than 45 dB
- Back light compensation: Automatic
- Sensor viewing angle: 120 -170°
- Water-proof grade: IP67
- Voltage range: 9-16v DC
- Working temperature: -20 - +70 OC
- Storage temperature: -30 - +75 OC



**SUNIT-R Reversing camera. All-In-Weather Camera offers camera technology connecting high imaging quality for Car reversing on Day and Night Visio.**

EU-Numberplate is included. Easy to Mount, easy to connect.

Steering-Guidelines ON / OFF selectable.

Application for SUNIT-Computer; **SUNIT Rear-View.**



IR-REVERSING CAMERA WITH NUMBER PLATE KIT



Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



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### SUNIT IC360 INDOOR SURVEILLANCE IR-CAMERA

- Image device: 1/4" CMOS
- Picture pixels: 640 x 480
- Signal system: NTSC/ PAL
- Synchronization system: Internal
- Horizontal definition: 420 TV lines
- Minimum illumination: 0.2 lux
- S/N raatio: Better than 45 dB
- Back light compensation: Automatic
- Viewing angle: 120 -170°
- Water-proof grade: IP67
- Voltage range: 9-16v DC
- Video output: 1vpp 75Ω



**SUNIT-IC360 IR-Security camera. Camera for areas where the mounting should be invisible and unnoticeable.**

Is widely used for car in-cabin installations like Police, Ambulances, where team-safety during transports shall be ensured.

Surface and vandal proof in-wall mounted. SUNIT-Quality Assured Individually.

### SUNIT 360 INDOOR SURVEILLANCE IR-CAMERA

- Anti fog glass.
- CCD imaging sensor
- 3D noise reduction
- Support NTSC / PAL.
- Image Sensor: CCD 7080D TV system
- Horizontal Resolution: 600 TV lines
- Effective Pixels:
  - PAL:628(H)\* 582(V)
  - NTSC:510(H)\* 492(V)
- View Angle: 150 degree
- Electronic Shutter:
  - 1/50 to 1/100,000 seconds
  - 1/60 to 1/100,000 seconds
- Video Output: 1.0Vpp, 750hm
- White Balance: Auto
- Bright color separation
- Power: DC 12V
- Water-proof: IP68



**Surface mounted Surveillance camera for In- and Outdoor areas where the mounting should be invisible and unnoticeable.**

Surface mounted Surveillance Camera for In- and Outdoor areas where the mounting should be invisible and unnoticeable.

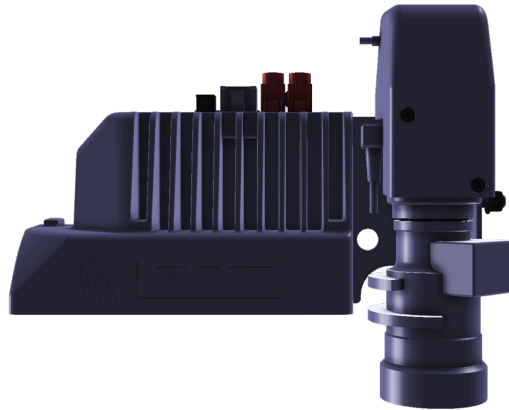
Is widely used for car Indoor-installations like Police, Ambulances, where team-safety during transports shall be ensured.

Outdoor installations as Car-Reversing and Surveillance on bikes.

### SUNIT FOX SUPER-SENSE IR-CAMERA

#### PRODUCT HIGHLIGHTS

- Signal type: Composite video/50 fps
- 22.2-6mm Focal Length with 2.7x Zoom
- 1/2" CCD Sensor
- Auto/Manual White Balance and Exposure, gamma
- Composite video output
- RS-485 Control
- 2.7x optical zoom F1.3 to T360
- Manual focus
- IR-Light Operational Distance 15 m
- LED- IR
- IR-Light Flashes synchronized by Frame-Frequencies.



#### SUPER-SENSE IR-CAMERA FOR DEMANDING ENVIRONMENTS

SUNIT-FOX with 1/2" CCD sensor is the Core for excellent ANPR-capturing. It is equipped with Extreme Low Light Sensitive, 2.2 to 6mm lens and Gamma correction selects video frames with excellent quality in all conditions.

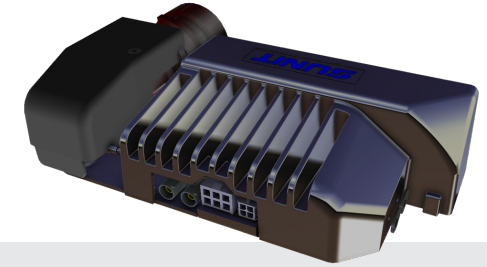
Strongly converging, 15 mm - 50 mm (3.3x) Focal length ensures excellent ANPR-functionality in all environmental conditions, day and night, sun and fog / snow.

LED-IR's having Videoframe-synchronized Flashing system makes possible a Low-Powered and extremely efficient IR-Lightning.

Image quality adjustments include White balance, Zoom, Focus, and Backlight Compensation.

Design follows the Industrial ISO-16750 Heavy Duty Standards.

Applicable on ANPR-Applications.



#### Technical Sheet

PARAMETER	SPECIFICATION
IMAGE DEVICE	1/2" interlinear Transfer CCD Image Sensor.
EFFECTIVE PIXELS	440.000. 752 (H) x 582 (V)
SENSITIVITY	High / Super High sensitivity (Near IR spectrum)(Selectable by AGC/MGC Selection switch)
VIDEO OUTPUT	Composite video, 1.0 V(p-p) 75Ω (Unbalanced)
HORIZONTAL RESOLUTION	More than 570TV-Lines (Centre)
MINIMUM ILLUMINATION	0,0001 lx. F1.4 / Low Light Sensitive
LENS	2.2-6mm HD 3MP Megapixel manual iris Day/Night Lens
ZOOM	2.7x manual
FOCUS SYSTEM	Manual
VIEWING	14.56°x8.26° (wide end) to 4.36°x2.36° (tele end)
MINIMUM OBJECT DISTANCE	1.000 mm
S/N RATIO (SIGNAL-TO-NOISE)	More than 50 dB. Signal amplified
ELECTRONIC IRISH	Auto IRIS 1/50-1/100000 sec (selectable with SENS-UP function)
ELECTRONIC SHUTTER	1/60 s to 1/100,000 s / Low-Shutter-Speed (selectable with SENS-UP function)
WHITE BALANCE	ATW <span style="float: right;">©SUNIT OY. All rights reserved. Specifications subject to change without notice</span>
GAIN	Auto / Manual (Manual Hi/Lo, Selectable by AGC/MGC Selection switch)
WIDE DYNAMIC RANGE	WDR(Digital Wide Dynamic Range) USER1 / USER2 / OFF
BACKLIGHT COMPENSATION	Traditional Backlight Compensation(BLC) mode and High Light Suppress Backlight(HSBLC) mode
MOTION DETECTION	Yes (Max. 4 areas selectable)
EXPOSURE CONTROL	Manual. Shutter, Sens Up, Automatic Gain Control, Backlight Compensation
MINIMUM ILLUMINATION	0,0001 lx. F1.4
PICTURE EFFECT	Freeze, Flip, Digital Zoom, Negative Image, Motion (left / right), Blemished pixel compensation
CONTROL INTERFACE	VISCA (TTL signal level), baud rate: 9.6 kb/s, 19.2 kb/s, 38.4 kb/s, 1 or 2 stop-bit selectable
DIMENSIONS	200 mm x 170 mm x 60 mm
WEIGHT	Approx. 600 g
OPERATION TEMPERATURE	-20 - +60 °C
POWER INPUT	DC12V±10% (camera), DC 10-16V (IR unit)
POWER CONSUMPTION	1,32W (camera), 10W average (IR unit)

## SUNIT WORKBOOK Q8A 5G QUAD-CORE ANDROID TABLET-PC



**SUNIT-WorkBook Q8a 5G Android-12 Tablet-PC** for Industry, Fleet and Field. Capacitive Touch, Gorilla Glass surface combined with Lightweight Tablet suits for any purposed industry. Front & Rear Camera, Capacitate Stylus-Interface and Audio with Microphone and Speaker offers great tool for Field service. Tri-Band GNSS engine, 5G/LTE, Dual-Channel Wi-Fi and Bluetooth 5.2 in latest technology supports any kind of Communication requirements. Battery for 8hr provides whole-shift Field service. Powerful Processing capacity with 2x 2.4 GHz ARM Cortex-A78 plus 6x 2.0 GHz ARM Cortex-A55, Cores suits for demanding applications with High-Quality Graphic interface. IP67 Shielded casing for all environmental demands.

Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



Certified facility.



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### Technical Sheet

<b>CPU</b>	2x 2.4 GHz ARM Cortex-A78, and 6x 2.0 GHz ARM Cortex-A55, Cores: 8	
<b>GRAPHICS</b>	ARM Mali. G68 MC4, Full support for 2D/3D graphics applications	
<b>RAM</b>	6 GB	
<b>SSD</b>	128 GB	
<b>O/S</b>	Android 12	
<b>AUDIO</b>	1.2W/8Ω Aluminium foil, IP67	
<b>MICROPHONE</b>	IP67 waterproof	
<b>CAMERA</b>	Front: 5MP Fixed Focus Rear: 13MP Auto Focus	
<b>SCREEN TYPE</b>	8" 800*1280, 500/1000 nits LED.	
<b>TOUCH</b>	PCAP, 5 points, Max. 10 points touch. Gorilla Glass 3rd Gen, Hardness 7H	
<b>5G</b>	LTE FDD: B1, B2, B3, B4, B5, B7, B8, B12, B13, B17, B18, B19, B20, B25, B26, B28A, B28B, LTE TDD: B34, B38, B39, B40, B41 WCDMA: B1, B2, B5, B8 TD-SCDMA: B34, B39 GSM: B2, B3, B5, B8 CDMA: BCD 5G: N1, N3, N5, N7, N8, N20, N28, N38, N40, N41, N77, N78, N79	
<b>WI-FI</b>	Wi-Fi6 802.11 (a/b/g/n/ac/ax)	
<b>BLUETOOTH</b>	Bluetooth 5.2 BLE Class 1	
<b>I/O</b>	1" 12pin USB +Charging 1" USB OTG +Charging 1" USB 3.0 1" Mini HDMI 1" DC Jack 1" Standard 3.5mm headphone 1" TF card slot 1" SIM card slot Aerial plug	
<b>POGO-I/O</b>	Pogo Pin 1*12pin USB + Charging	
<b>GNSS</b>	GPS, BeiDou, Galileo, GLONASS, QZSS.	
<b>GOOGLE GMS</b>	Yes	
<b>POWER-IN</b>	9V ... 36V, Power thru DC adapter	
<b>BATTERY</b>	9800mAh / 3.8V Lithium ion. Duration LCD 50% brightness, play video 1080P up to 10h	
<b>DIMENSION</b>	227*142.4*22.9mm. Weight 0.8KG/1.2KG (NW/GW)	
<b>COMPLIANT</b>	ECE 10R-06, ISO-16750, FCC CE WEEE 2002/96/EG, RoHS 2002/95EC, REACH 2006/121/EC	
<b>ENVIRONMENT</b>	-20C ... +60C, 0%-90% Relative Humidity.	

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## SUNIT WORKBOOK Q8A QUAD-CORE ANDROID TABLET-PC



**SUNIT-WorkBook Q8a Android-12 Tablet-PC** for Industry, Fleet and Field.  
Capacitive Touch, Gorilla Glass surface combined with Lightweight Tablet suits for any purposed industry.  
Front & Rear Camera, Capacitate Stylus-Interface and Audio with Microphone and Speaker offers great tool for Field service.  
Tri-Band GNSS engine, 4G/LTE, Dual-Channel Wi-Fi and Bluetooth 5.0 in latest technology supports any kind of Communication requirements.  
Battery for 8Hr provides whole-shift Field service.  
Powerful Processing capacity with 2x 2.0 GHz ARM Cortex-A75 plus 6x 1.8 GHz ARM Cortex-A55, Cores suits for demanding applications with High-Quality Graphic interface.  
IP67 Shielded casing for all environmental demands.

Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



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### Technical Sheet

<b>CPU</b>	2x 2.0 GHz ARM Cortex-A75, and 6x 1.8 GHz ARM Cortex-A55, Cores: 8																			
<b>GRAPHICS</b>	ARM Mail. G52 MC2 Full support for 2D/3D graphics applications																			
<b>RAM</b>	6 GB																			
<b>SSD</b>	64 GB																			
<b>O/S</b>	Android 12																			
<b>AUDIO</b>	1.2W/8Ω Aluminium foil, IP67																			
<b>MICROPHONE</b>	Analog MIC / IP67																			
<b>CAMERA</b>	Front: 5MP Fixed Focus Rear: 13MP Auto Focus																			
<b>SCREEN TYPE</b>	8inch 800*1280 resolution. 500/1000cd/m <sup>2</sup> LED.																			
<b>TOUCH</b>	PCAP, 5 points, Max. 10 points touch. Gorilla Glass 3rd Gen, Hardness 7H																			
<b>4G</b>	<table border="0"> <tr> <td>LTE FDD:</td> <td>B1, B2, B3, B4, B5, B7, B8, B12, B13, B17, B18, B19, B20, B25, B26, B28A, B28B, B66</td> </tr> <tr> <td>LTE TDD:</td> <td>B34, B38, B39, B40, B41</td> </tr> <tr> <td>WCDMA:</td> <td>B1, B2, B5, B8</td> </tr> <tr> <td>TD-SCDMA:</td> <td>B34, B39</td> </tr> <tr> <td>GSM:</td> <td>B2, B3, B5, B8</td> </tr> <tr> <td>CDMA:</td> <td>BC0</td> </tr> </table>		LTE FDD:	B1, B2, B3, B4, B5, B7, B8, B12, B13, B17, B18, B19, B20, B25, B26, B28A, B28B, B66	LTE TDD:	B34, B38, B39, B40, B41	WCDMA:	B1, B2, B5, B8	TD-SCDMA:	B34, B39	GSM:	B2, B3, B5, B8	CDMA:	BC0						
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<b>WI-FI</b>	Wi-Fi5 802.11(a/b/g/n/ac)																			
<b>BLUETOOTH</b>	Bluetooth 5.0 BLE Class 1																			
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<b>POGO-I/O</b>	Pogo Pin 1*12pin USB + Charging																			
<b>GNSS</b>	GPS, BeiDou, Galileo, GLONASS, QZSS.																			
<b>GOOGLE GMS</b>	Yes																			
<b>POWER-IN</b>	9V ... 36V. Power thru DC adapter																			
<b>BATTERY</b>	9800mAh / 3.8V Lithium ion. Duration LCD 50% brightness, play video 1080P up to 10h																			
<b>DIMENSION</b>	227*142.4*22.9mm. Weight 0.8KG/1.2KG (NW/GW)																			
<b>COMPLIANT</b>	ECE 10R-06, ISO-16750, FCC CE WEEE 2002/96/EG, RoHS 2002/95EC, REACH 2006/121/EC																			
<b>ENVIRONMENT</b>	-20C ... +60C. 0%-90% Relative Humidity.																			

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## SUNIT WORKBOOK Q8 QUAD-CORE WINDOWS TABLET-PC FOR HARSH ENVIRONMENTS



**SUNIT-WorkBook Q8 Tablet-PC** for Industry, Fleet and Field. Capacitive Touch, Gorilla Glass surface combined with Lightweight Tablet suits for any purposed industry. Strong 800cd/m2 LED Screen with PCAP Touch and Gorilla-class hardness supports easy to use and long-life HMI. Front & Rear Camera, Capacitate Stylus-interface and Audio with Microphone and Speaker offers great tool for Field use. 72-channel GNSS engine, 4G/LTE, Dual-Channel Wi-Fi and Bluetooth in latest technology supports all kind of Communication requirements. Battery for 8Hr provides whole-shift Field service. Intel Atom® x5-Z8350 Quad Core Processor with Ultra-Low energy consume ensures long field time. IP67 Shielded casing for all environmental demands.



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Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.

### Technical Sheet

<b>CPU</b>	Intel Atom® Processor X Series x5-Z8350, 4 x 1.44GHz					
<b>GRAPHICS</b>	Intel HD Graphics 400 (Braswell)					
<b>RAM</b>	4 GB					
<b>SSD</b>	64 GB					
<b>O/S</b>	Windows 10-IoT					
<b>AUDIO</b>	1.2W/8Ω Aluminium foil, IP67					
<b>MICROPHONE</b>	Simulated MIC, IP67					
<b>CAMERA</b>	Front: 2MP Rear: 5MP Auto Focus					
<b>SCREEN TYPE</b>	8inch 800*1280 IPS 16:10 resolution. 850cd/m <sup>2</sup> LED.					
<b>TOUCH</b>	PCAP, 5 points, Max. 10 points touch. Gorilla Glass 3rd Gen, Hardness					
<b>4G</b>	LTE FDD:	B1(2100MHz),	B3(1800MHz),	B5(850MHz),	B7(2600MHz),	B8(900MHz), B20(800MHz)
	LTE TDD:	B38(2600MHz),	B40(2300MHz),	B41(2500MHz)		
	WCDMA:	B1(2100MHz),	B5(850MHz),	B8(900MHz)		
	GSM:	B3(1800MHz),	B8(900MHz)			
<b>WI-FI</b>	Wi-Fi 802.11(a/b/g/n/ac)					
<b>BLUETOOTH</b>	Bluetooth 4.1 BLE Class 1					
<b>I/O</b>	1* 12pin USB +Charging 1* USB OTG +Charging 1* USB 3.0 1* Mini HDMI 1* DC Jack 1* Standard 3.5mm headphone 1* TF card slot 1* SIM card slot Aerial plug (e.g. CAN-Interface – optional)					
<b>POGO-I/O</b>	Pogo Pin 1*12pin USB + Charging					
<b>GNSS</b>	U.Blox M8N. BeiDou, Galileo, GLONASS, GPS / QZSS.					
<b>POWER-IN</b>	9V ... 36V. Power thru DC adapter					
<b>BATTERY</b>	9800mAh / 3.8V Lithium ion. Duration LCD 50% brightness, play video 1080P up to 8h					
<b>DIMENSION</b>	227*142.4*22.9mm. Weight 0.7KG/1.2KG (NW/GW)					
<b>COMPLIANT</b>	ECE 10R-06, ISO-16750, FCC CE WEEE 2002/96/EG, RoHS 2002/95EC, REACH 2006/121/EC					
<b>ENVIRONMENT</b>	-20C ... +60C. 0%-90% Relative Humidity.					

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## SUNIT WORKBOOK Q10A QUAD-CORE ANDROID TABLET-PC



**SUNIT-WorkBook Q10a Android-10 Tablet-PC** for Industry, Fleet and Field.

Capacitive Touch, Gorilla Glass surface combined with Lightweight Tablet suits for any purposed industry. Front & Rear Camera, Capacitate Stylus-Interface and Audio with Microphone and Speaker offers great tool for Field service.

Tri-Band GNSS engine, 4G/LTE, Dual-Channel Wi-Fi and Bluetooth in latest technology supports any kind of Communication requirements.

Battery for 8Hr provides whole-shift Field service. Powerful Processing capacity with 4x 2.0 GHz ARM Cortex-A73 plus 4x 2.0 GHz ARM Cortex-A53, Cores suits for demanding applications with High-Quality Graphic interface. IP67 Shielded casing for all environmental demands.



Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



Certified facility.



Mark Of Finnish Quality And Local Production.

### Technical Sheet

<b>CPU</b>	4x 2.0 GHz ARM Cortex-A73, and 4x 2.0 GHz ARM Cortex-A53, Cores: 8		
<b>GRAPHICS</b>	ARM Mali. G72 MP3, 800 MHz, Cores: 3 Full support for 2D/3D graphics applications		
<b>RAM</b>	4 GB		
<b>SSD</b>	64 GB		
<b>O/S</b>	Android 10		
<b>AUDIO</b>	1.2W/8Ω Aluminium foil, IP67 water proof		
<b>MICROPHONE</b>	Analog MIC / IP67		
<b>CAMERA</b>	Front: 5MP Fixed focus Rear: 13MP Auto focus		
<b>SCREEN TYPE</b>	1920*1200,10.1 inch (16:10) LCD		
<b>TOUCH</b>	PCAP, 5 points touch, Max. 10 points touch Gorilla Glass 3rd Gen, Hardness 7H		
<b>4G</b>	LTE FDD: B1, B2, B3, B4, B5, B7, B8, B28A LTE TDD: B38, B39, B40, B41 WCDMA: B1, B2, B5, B8 TD-SCDMA: B38, B39, B40, B41 GSM: B2, B3, B5, B8		
<b>WI-FI</b>	Wi-Fi 802.11 (a/b/g/n/ac) Dual Channel 2,4G+5.8G		
<b>BLUETOOTH</b>	Bluetooth 4.2 BLE Class 1		
<b>I/O</b>	1* 12 pin, USB + Charging 1* USB OTG + Charging 1* USB 2.0 1* Mini HDMI 1* DJ Jack 1* Standard 3.5mm headphone 1* TF card 1* SIM card Aerial plug (e.g. CAN-interface - optional)		©SUNIT OY. All rights reserved. Specifications subject to change without notice
<b>POGO-I/O</b>	Pogo pin *1, 12 pin, USB + Charging		
<b>GNSS</b>	MT6631 GPS, GLONASS, GALILEO		
<b>GOOGLE GMS</b>	YES		
<b>POWER-IN</b>	9V ... 36V, Power thru DC adapter		
<b>BATTERY</b>	1000mAh / 3.8V Lithium ion LCD 50% brightness, play video 1080P up to 10H		
<b>DIMENSION</b>	274*181*23mm		
<b>COMPLIANT</b>	ECE 10R-06, ISO-16750, FCC CE WEEE 2002/96/EG, RoHS 2002/95EC, REACH 2006/121/EC		
<b>ENVIRONMENT</b>	-20C ... +60C. 0%-90% Relative Humidity.		

## SUNIT WORKBOOK Q10 QUAD-CORE WINDOWS TABLET-PC FOR HARSH ENVIRONMENTS



**SUNIT-WorkBook Q10 Tablet-PC** for Industry, Fleet and Field. Capacitive Touch, Gorilla Glass surface combined with Lightweight Tablet suits for any purposed industry. Strong 1000cd/m2 LED Screen with PCAP Touch and Gorilla-class hardness supports easy to use and long-life HMI. Front & Rear Camera, Capacitate Stylus-interface and Audio with Microphone and Speaker offers great tool for Field use. 72-channel GNSS engine, 4G/LTE, Dual-Channel Wi-Fi and Bluetooth in latest technology supports all kind of Communication requirements. Battery for 8Hr provides whole-shift Field service. Intel Atom® x5-Z8350 Quad Core Processor with Ultra-Low energy consume ensures long field time. IP67 Shielded casing for all environmental demands.



Sunit products meet international road vehicle and environmental standards, including ISO 16750, UNECE 10R-05 0020, RoHS, REACH, and WEEE.



Certified facility.



Mark Of Finnish Quality And Local Production.

### Technical Sheet

<b>CPU</b>	Intel Atom® Processor X Series x5-Z8350, 4 x 1.44GHz
<b>GRAPHICS</b>	Intel HD Graphics 400 (Braswell)
<b>RAM</b>	4 GB
<b>SSD</b>	64 GB
<b>O/S</b>	Windows 10
<b>AUDIO</b>	1.2W/8Ω Aluminium foil, IP67 water proof
<b>MICROPHONE</b>	Dual MIC / IP67
<b>CAMERA</b>	Front: 2MP fixed focus camera Rear: 5MP Auto focus camera
<b>SCREEN TYPE</b>	800*1280,10 inch IPS LCD, 16:10 vertical, MIPI connection
<b>TOUCH</b>	PCAP, 5 points touch, Max. 10 points touch Gorilla Glass 3rd Gen, Hardness 7H
<b>4G</b>	LTE FDD: B1, B3, B5, B7, B8, B20 LTE TDD: B38, B40, B41 WCDMA: B1, B5, B8 GSM: B3, B8
<b>WI-FI</b>	Wi-Fi 802.11 (a/b/g/n/ac) Dual Channel 2.4G+5.8G
<b>BLUETOOTH</b>	Bluetooth 4.2 BLE Class 1
<b>I/O</b>	1* 12 pin, USB + Charging 1* USB OTG + Charging 1* USB 2.0 1* Mini HDMI 1* DJ Jack 1* Standard 3.5mm headphone 1* TF card 1* SIM card Aerial plug (e.g. CAN-interface - optional)
<b>POGO-I/O</b>	Pogo pin *1, 12 pin, USB + Charging
<b>GNSS</b>	U.Blox M7N, BeiDou, GLONASS, GPS
<b>POWER-IN</b>	9V ... 36V, Power thru DC adapter
<b>BATTERY</b>	3.8V/10000mAh LCD 50% brightness, playing video 1080P up to 8 hours
<b>DIMENSION</b>	274*181*23mm
<b>COMPLIANT</b>	ECE 10R-06, ISO-16750, FCC CE WEEE 2002/96/EG, RoHS 2002/95EC, REACH 2006/121/EC
<b>ENVIRONMENT</b>	-20C ... +60C, 0%-90% Relative Humidity.

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