

# SUNIT

Bridge for Demanding Duties

## SUNIT FDQ

INTEL i7 4 x 2.0GHZ CPU-SERVER



- 6<sup>th</sup> Gen. Wide-temp. Intel® i7 6822EQ Skylake
- 4 x 2.0GHz
- 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. monitory



### QUAD-CORE HEAVY-DUTY COMPUTER FOR EXTREMELY TOUGH CONDITIONS

**SUNIT-FDQ** for Demanding Duties as Industry-Automation, Fleets and Heavy In-Fields.

**SUNIT-FDQ** Continues moreover 20 years tradition of FD-series, having tens of thousands installations in most demanding industry, as Mining, Logging, Heavy haulage, Terminals and Harbours, Airborne and Rescue.

F-Series has been recognized extremely reliable server on 24-hour use for hundreds of thousands of day-around services under extremely tough conditions.



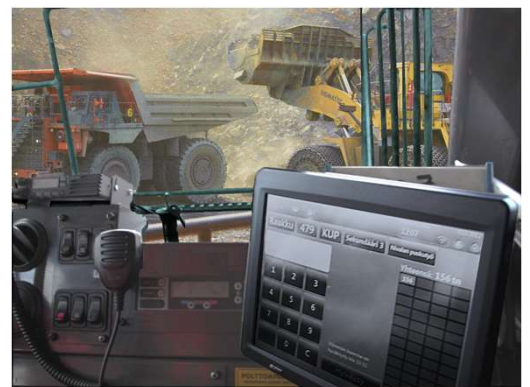
**SUNIT-FDQ** base on Smart 1-DIN design with Full-scale Open-architecture Computing with geometrical designed cast aluminium body and purpose-designed conformal coated solid-electronics. **Tri-graphic** technology with Intel HD-Iris technology and Intel HD Audio creates life-like Visuality.

Inbuilt IoT-computer for CAN-Bus, sensors and data-I/O's are ease-to-utilize by Client applications.

High-speed 4G/LTE Modem, Dual-mode Wi-Fi, Bluetooth 4.2BLE and Gigabit Ethernet efforts safe and rapid communication. Accurate positioning with ADR ensures all-time positioning.

**SUNIT-FQA** unites long In-Field service time with affordable High standard Computing technology complying with Industry ISO-16750 Electronics-Standard and is E-Certified.

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



#### SUNIT in Brief—Focus on Client Entrepreneur

Over 20 year's core-focus on tough computers and deep knowledge of client-demands has brought us prime expertise in technology.

We demand ourselves deep knowledge of the Clients entrepreneur and we strive to bring the long-term technology into his ICT.

Our technology connects OAC - Open Architecture Computing to IoT - Internet of Things with Powerful Processing.

Our Products are covered by Industry Standard ISO-16750, UNECE-Regulations and Environmental Standards.

[www.sunitt.fi](http://www.sunitt.fi)

[marketing@sunitt.fi](mailto:marketing@sunitt.fi)



N° FIHSK10299467A

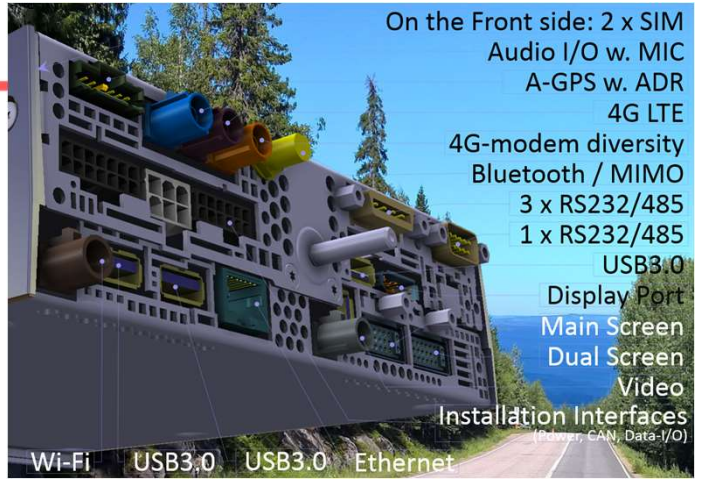
7826

# SUNIT

Bridge for Demanding Duties

## SUNIT FDQ

INTEL i7 4 x 2.0GHz CPU-SERVER



## Technical Sheet

<b>CPU</b>	6 <sup>th</sup> Gen. Intel® Core™ i7-6822EQ Skylake-H, 4x2.0GHz, Smart-Cache 8MB, DMI3 8GT/s.
<b>RAM</b>	Dual Channel 4GB (Option 8GB) DDR4-2133MHz, 34GB/s.
<b>System Bus</b>	Mobile Intel® HM170 PCH. Intel® Rapid Storage technology, Flexible RAID Configuration, Flexible Display Interface (FDI) and Intel Clear Video HD Technology. Intel® HD Audio
<b>Storage</b>	2400 GB Wide temperature mSATA SSD / Optional 480 ... 1000 GB. SATA-III 6GB/s.
<b>O/S</b>	WIN-10 IoT Enterprise LTSB/CBB/CB, Win-10 Pro, Win-7 Pro , Win-8.1 Pro, WES-8, LINUX
<b>Graphics</b>	Intel® HD 530 Graphics. 4K Media Codecs. High 3D-Rendering on Low-Power mode. Clear Video HD.
<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. 2. Intel® High Definition Audio Line-Out. Wake-UP for External Amplifier. 3. 2 x 30W Speaker lines, Stereo.
<b>Microphone</b>	Microphone-In.
<b>Screen Interface</b>	3 x : 2 x EMI-Shielded, Sunit Touch Digital-LVDS Screen 1 x Display-Port
<b>Screen Type</b>	Sunit Digital Screen (See Specifications). CCTV Monitor Display Port.
<b>Ethernet</b>	Intel® i211-AT. Low Power GB-Ethernet Up-to 2.5GbE. 10/100/1000 Base-T. RJ45 Connect.
<b>USB</b>	4 x USB 3.0
<b>Modem</b>	4G: LTE, DC-HSPA+, UMTS, EDGE, GPRS, Voice, Echo Arithmetic , eCall, VoLTE(Option)
<b>SIM-slot</b>	2 x Front Feed
<b>Video-In</b>	1 x (Option 4 x) Conexant CX23885 PCI-E Video and Broadcast Audio Decoder. Automatic A/V-standard detection and configuration. Stereo, Mono, Trivox Supported. NTSC, PAL, SECAM.
<b>Serial Interface</b>	1 x. Configurable RS232 / RS485. (Termination by SW settings) (Option; 2 x)
<b>Wi-Fi</b>	Intel® Dual-Band Wireless AC-3165, 433Mb/sec. Data Link Protocol: 802.11a/b/g/n/ac. Compliant Standards: IEEE 802.11a/b/d/g/i, IEEE 802.1x. 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-Moding. 9V .... 36V. API-Read via T-LINK
<b>CAN</b>	2 x High-Speed CAN: SAE J1939, FMS-Protocol. API-Rewrite via T-LINK.
<b>Digital-IN</b>	4 x Wake-Up 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 On-Power D-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-write via T-LINK · 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>Gyro</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 receiver (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 ... 36VDC. API-Read via T-LINK
<b>Back-Up</b>	Internal, Non-Explosive Back-Up Battery NiMh (Nickel-Metal-Hybrid) for Abrupt Power Interrupts. 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 2,5kg.
<b>Casing &amp; Body</b>	Geometry-designed impact protective Aluminium Body. High-density Steel cover.
<b>Compliant</b>	ECE 10R-04, ISO-16750, FCC CE WEEE 2002/96/EG, RoHS 2002/95/EC, REACH 2006/121/EC
<b>Environment</b>	-40°C ... +85°C. (processor -40°C ... + 110°C) Temperature monitored. 0%~90% Relative Humidity. The product meets all the Vehicle, Machinery and Industrial Environmental criteria's worldwide and is Qualify tested by member of International Laboratory Accreditation Cooperation (ILAC)

©SUNIT OY. All rights reserved.  
Specifications subject to change without notice

