

CQ20

Compact Vehicle PC for Connected Fleets and On-Board AI



Product Overview

The CQ20 is the **smallest PC in our CQ range**. It powers on and off with the vehicle ignition, runs your dispatch, telematics, mapping, signage or analytics software in a durable fanless chassis, with no moving parts.

The 0.9 kg chassis fits behind a dashboard, inside a rescue control van, on a tanker bulkhead, or in the seat-back of an airside bus. Rated for vehicle operating temperatures, vibration and dust.

Optional **4G LTE or 5G cellular** keeps connected fleets reachable wherever they roam, with an integrated **GNSS receiver** (GPS, GLONASS, BeiDou, Galileo, QZSS, NavIC) for vehicle positioning. **Wi-Fi 7 and Bluetooth 5.4** are available for depot-to-vehicle data offload, driver-device pairing and short-range telemetry. Every wireless module is fitted at build and tested before shipping.

Every CQ20 ships with **PCU (Platform Control Utility)**, our in-house management software. The desktop GUI configures the four timers that govern the vehicle power sequence. The CLI scripts the same operations into fleet provisioning. Windows and Linux.

Built to order in the UK with your modules, memory, storage and software pre-installed. Each unit is tested before shipping. Two year warranty as standard, extendable to three or five.

Applications

Emergency Response

Search & Rescue

Airside Operations

Fleet Telematics

Job Dispatch

Waste & Recycling

Fuel & Tanker Fleets

Highways Data Capture

Digital Signage

In-Vehicle Advertising

Edge AI

ANPR

Driver Monitoring

Video Analytics

Mobile Data Terminal

CAN-bus Logging

GPS Tracking

Mapping & Navigation

Mobile CCTV

Product Highlights

- **Quad-core x86 platform** (Intel Atom x6425E, 2.0 GHz) for off-the-shelf or in-house Windows and Linux software
- **Fanless aluminium chassis** for dusty, sealed and high-vibration installations
- **Up to 32 GB DDR4 RAM** for memory-hungry analytics, mapping or multi-app workloads
- **Compact 0.9 kg chassis** at 150 x 105 x 49 mm for tight installs behind dashboards, on bulkheads and in seat-backs
- **Rated -40°C to +70°C** for unheated cabs, roof racks and outdoor enclosures (*with extended temperature components*)
- Optional **26 TOPS Hailo-8 AI accelerator** for on-vehicle ANPR, driver monitoring, passenger counting and live video analytics
- **2.5GbE plus Gigabit Ethernet** for vehicle backbone, camera networks or PoE switches
- Optional **4G LTE or 5G** cellular with integrated multi-constellation GNSS, via M.2 B-Key slot with externally accessible SIM holder
- Optional **Wi-Fi 7 and Bluetooth 5.4** with industrial extended-temperature variant available
- **2 x RS232/422/485 COM ports** for sensors, ECUs and weighing systems
- **4 x USB ports** for touchscreens, barcode scanners and other peripherals
- **Dual 4K DisplayPort outputs** for driver console plus operator or passenger screen
- **SATA, mSATA and M.2 storage** options, including industrial-grade SSDs on request
- **9-36 VDC vehicle power (12V and 24V)** with reverse-polarity, over-voltage and over-current protection
- **Programmable ignition control** with four configurable timers (anti-crank, boot, shutdown, force-off) set in software via PCU - no BIOS access required
- **PCU (Platform Control Utility) included** - our in-house ignition timing utility with desktop GUI and scriptable CLI, on Windows and Linux
- **TPM 2.0 onboard** for security-sensitive fleet and government deployments
- **Windows 10/11 and Linux** supported, with OS imaging and pre-install services
- **CE, FCC Class A, UKCA, RoHS and WEEE** compliant; E-mark E11 type approval available
- **Built to order in the UK** with 2-year warranty extendable to 3 or 5 years

Technical Specifications

Processing & Security

Processor

Intel Atom x6425E (Elkhart Lake, embedded series). Industrial-grade x86 platform designed for low-power, always-on vehicle deployment.

- Base frequency 2.0 GHz, burst up to 3.0 GHz
- 4 cores / 4 threads
- 1.5 MB L2 cache
- 12W TDP

RAM

1 x 260-pin DDR4 SODIMM, single channel, supporting:

- 2400 / 2667 / 3200 MT/s
- **Up to 32 GB capacity**
- ECC support via in-band error correction

Optional extended-temperature memory, allowing PC operating temperature of -40°C to +70°C.

Security & Virtualisation

- Intel VT-x and VT-d hardware virtualisation
- AES-NI hardware encryption acceleration
- Intel Boot Guard and Intel Platform Trust Technology (PTT)
- Execute Disable Bit (XD) for memory protection

BIOS

Custom In-CarPC UEFI BIOS based on AMI UEFI, 256 Mbit SPI Flash. Pre-configured at build time for vehicle deployment (ignition control, boot order, power-loss recovery).

TPM

Trusted Platform Module (TPM) 2.0 onboard, for hardware-rooted device identity, secure boot, BitLocker/dm-crypt key storage and security-sensitive fleet or government deployments.

Technical Specifications (cont.)

Watchdog Software-programmable watchdog timer (1-255 seconds). Generates automatic system reset in the event of a software crash or hang.

AI Acceleration

Hailo-8 AI Accelerator Optional **Hailo-8 edge AI module** via M.2 Key M slot. Adds local AI inference without the heat, power draw or licensing of a discrete GPU.

- 26 TOPS (INT8) edge inference
- PCIe Gen 3 x4 interface
- Typical 3.3W under ResNet-50, 2.4W under MobileNet-SSD

Hailo-8 Vehicle Deployment

- Industrial extended-temperature variant (-40°C to +85°C)
- Onboard overheat and overcurrent protection
- Heatspreader to chassis for sustained inference workloads

Hailo-8 Typical Use Cases

- ANPR (Automatic Number Plate Recognition)
- Driver monitoring (drowsiness, distraction, seat-belt)
- Passenger counting and dwell-time analytics
- On-board video analytics for CCTV-equipped vehicles
- All inference runs locally on the vehicle, not in the cloud

Storage

SSD (M.2 NVMe) 1 x **M.2 NVMe slot**, PCIe-attached for high-throughput workloads.

Standard Temperature:

- 256 GB, 512 GB, 1 TB, 2 TB capacities
- High-performance variant also available across all capacities

Extended Temperature:

- 256 GB, 512 GB, 1 TB capacities
- Industrial-grade memory
- Allows PC operating temperature of -40°C to +70°C

Technical Specifications (cont.)

SSD (2.5" SATA) 1 x internal 2.5 inch SATA bay (drives up to 9.5 mm height). Compatible with industrial and consumer SSDs.

Standard Temperature:

- 128 GB, 256 GB, 512 GB, 1 TB, 2 TB capacities
- Ultra-high performance and endurance on 256 GB and above

Extended Temperature:

- 128 GB, 256 GB, 512 GB, 1 TB capacities
- Industrial-grade memory
- Allows PC operating temperature of -40°C to +70°C

mSATA

1 x mSATA slot for compact SATA-protocol SSDs (shared with mini PCIe slot 1).

Display & Audio

Graphics

Intel UHD Graphics (integrated), supporting up to 2 independent display outputs.

Display outputs:

- 2 x DisplayPort 1.4 (DP++) on rear I/O
- Maximum resolution 4096 x 2160 @ 60Hz per port
- Dual independent display supported (driver console plus passenger or operator screen)

Codec & API support:

- Hardware decode: H.265 (HEVC), H.264, VP9, AV1
- Hardware encode: H.265, H.264
- OpenGL 4.6, DirectX 12.1, OpenCL 3.0, Vulkan 1.2

Audio

Realtek HD Audio (ALC888S codec) with external 3.5 mm jacks for Line-Out and Mic-In on rear I/O.

Technical Specifications (cont.)

Networking & Wireless

LAN

2 x RJ45 Ethernet with link-status and activity LED indicators on each port.

LAN 1 (multi-gigabit):

- Intel I225 controller
- 2.5GbE / 1GbE / 100Mbps / 10Mbps auto-negotiate
- Wake-on-LAN and PXE boot supported

LAN 2 (gigabit):

- Intel I210 controller
- 1GbE / 100Mbps / 10Mbps auto-negotiate
- Wake-on-LAN and PXE boot supported

Cellular (4G LTE)

Optional **4G LTE module** with integrated multi-constellation GNSS receiver. Designed for permanent vehicle deployment in connected fleets, telematics gateways and mobile workforce kit.

- LTE Cat 7 downlink, up to 300 Mbps (2-carrier aggregation, 64-QAM)
- LTE Cat 13 uplink, up to 150 Mbps (2-carrier aggregation, 64-QAM)
- Fallback to DC-HSPA+ / HSPA+ / UMTS (up to 42 Mbps DL, 5.76 Mbps UL)
- 2x2 LTE MIMO for higher throughput and link resilience
- Receive diversity on supported UMTS bands

4G LTE Bands

- FDD-LTE: B1, B3, B5, B7, B8, B20, B28
- TDD-LTE: B32, B38, B40, B41, B42, B43
- Carrier aggregation: 1+8, 1+20, 1+28, 3+7, 3+8, 3+20, 3+28, 7+8, 7+20, 7+28, 20+32, and others

UMTS / 3G Fallback

WCDMA: Band 1 (2100 MHz), Band 5 (850 MHz), Band 8 (900 MHz)

Integrated GNSS (4G)

- Concurrent GPS, GLONASS, BeiDou, Galileo and QZSS
- Assisted GNSS (A-GPS) and standalone modes
- GNSS reception on dedicated antenna or shared diversity connector
- Position accuracy: under 5 m (50% CEP), under 9 m (95% CEP)

Technical Specifications (cont.)

Cellular SIM & Connectivity

- 1 x **externally accessible SIM holder** (1.8V and 3V compatible) fitted as standard
- One cellular module at a time. Contact us for custom requirements.
- eSIM or additional SIM holders available on request - contact us
- Multi-network roaming SIMs available on request
- Pre-provisioning service available at the time of build

Cellular Form Factor & Vehicle Deployment (4G)

- M.2 3042-S3-B (B-Key) module form factor
- USB 3.0 host interface for full-throughput data path
- MBIM (Windows / Linux) and QMI (Linux / Android) driver support
- Operating temperature -30°C to +70°C (3GPP compliant), -40°C to +85°C extended (Class B)
- Designed for shock, vibration and continuous-on operation
- Antenna control GPIOs for switched / active automotive antennas

Model code: **U12**

Technical Specifications (cont.)

Cellular (5G)

Optional **5G NR RedCap (Release-17 Reduced Capability) module** for next-generation connected fleets. Standalone (SA) architecture with integrated dual-frequency GNSS (L1+L5). Backwards compatible with 4G LTE for full coverage in non-5G areas.

5G NR RedCap performance:

- 5G NR RedCap Sub-6 GHz (FR1), Release-17, Standalone (SA) architecture
- Downlink up to 223 Mbps / Uplink up to 123 Mbps (256QAM)
- QPSK, 16 QAM, 64 QAM and 256 QAM uplink and downlink
- 2x2 MIMO antenna support

4G LTE fallback:

- LTE Cat 4 fallback: downlink up to 200 Mbps / uplink up to 105 Mbps
- Seamless handover between 5G NR and LTE for continuous coverage

Integrated GNSS (dual-frequency):

- Concurrent GPS, GLONASS, BeiDou, Galileo, QZSS and NavIC
- Dual-frequency L1 + L5 for enhanced positioning accuracy
- Horizontal accuracy: under 2 m (50 percentile CEP)
- Assisted GNSS (A-GNSS) and standalone modes
- Hot start: 1 s / Warm start: 29 s / Cold start: 32 s

Form factor and connectivity:

- M.2 3042-S3-B (B-Key) module form factor
- USB 2.0 host interface
- MBIM (Windows / Linux) and QMI (Linux) driver support
- 1 x externally accessible SIM holder (1.8V and 3V SIM compatible)
- Multi-network roaming SIMs available on request
- Pre-provisioning service available at time of build
- Operating temperature -30°C to +70°C (3GPP compliant), -40°C to +85°C extended (Class B)

Model code: **U14**

5G NR Bands

- FDD-NR: n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n30, n66, n70, n71
- TDD-NR: n38, n40, n41, n48, n77, n78, n79

Technical Specifications (cont.)

WLAN & Bluetooth

Optional **Wi-Fi 7 / Bluetooth 5.4** wireless module fitted to the CQ20's internal mini PCIe slot via an **M.2 2230 E-Key to mini PCIe adapter**. Supports 802.11be tri-band operation for depot-to-vehicle data offload, driver-device pairing and short-range telemetry.

- 802.11a/b/g/n/ac/ax/be (Wi-Fi 7)
- Tri-band: 2.4 GHz, 5 GHz and 6 GHz operation
- 2x2 MU-MIMO (2T2R, 2 spatial streams)
- Up to 320 MHz channel width, 4K-QAM modulation
- Multi-Link Operation (MLO) and dual-band concurrent (DBDC) support
- Bluetooth 5.4 (LE Audio, Auracast, longer range)
- WPA3 and PMF security
- Wi-Fi: PCIe interface / Bluetooth: USB interface
- 2 x SMA-RP antenna connectors on chassis (antennas available separately)
- Module form factor: M.2 2230 E-Key (fitted via adapter to mini PCIe slot)
- Windows 10/11 and Linux driver support

Wi-Fi Standard Temp (W21)

- Commercial-grade Wi-Fi 7 module
- Operating range 0°C to +80°C
- Up to 5.8 Gbps maximum link rate (6 GHz, 320 MHz, 4K-QAM)
- Best fit for cabin-mounted units, signage and indoor / depot-side deployments where ambient temperature is controlled

Wi-Fi Extended Temp (W22)

- Industrial-grade Wi-Fi 7 module, FCC, IC and CE certified
- Operating range -40°C to +85°C
- Same Wi-Fi 7 feature set as W21 (tri-band, 320 MHz, 4K-QAM, 2x2 MU-MIMO, BT 5.4)
- Required for unheated cabs, roof-mounted enclosures and full -40°C to +70°C PC operating range

Choosing W21 vs W22

- W21 is the lower-cost option where the PC is mounted in a heated cab and not exposed to sub-zero overnight soak
- W22 is required wherever the PC itself is configured for -40°C operation, or where ambient may exceed +80°C inside the enclosure
- If unsure, specify W22 to guarantee the wireless module matches the PC's environmental rating

Technical Specifications (cont.)

I/O & Expansion

USB **4 x USB Type-A ports** on rear I/O for touchscreens, barcode scanners, GPS pucks and other peripherals.

- 3 x USB 3.2 Gen2 (10 Gbps each)
- 1 x USB 2.0 (480 Mbps)
- Per-port over-current protection

Serial **2 x DB9 COM ports** on rear I/O, each independently configurable:

- RS-232, RS-422 or RS-485 per-port selection
- RS-485 auto-flow control supported

Power

Power Supply **Internal intelligent automotive power supply** with full ignition control, designed for permanent in-vehicle installation.

- Input voltage 9V to 36V (12V and 24V vehicle systems)
- Reverse-polarity, over-voltage and over-current protection
- Protection against transients and load dumps
- High efficiency for extended battery life
- Terminal block supplied for power and ignition input connector

Ignition Control & Shutdown

- PC automatically turns on and off with vehicle ignition
- Four configurable timers govern the power sequence: anti-crank, boot, shutdown and force-off (set via PCU software - see Platform Control Utility section below)
- OS loading guard timer prevents shutdown attempts before boot completes
- Hard Power Off cuts power if software hangs during shutdown, preventing battery drain
- Automatic shutdown on low battery (12V vehicles, or 24V via voltage dropper)

Power Monitoring & Control

- External power switch on front panel
- LED status indicator on front panel
- Ignition status detectable via software
- **PCU (Platform Control Utility)** included for ignition timing configuration, with desktop GUI and scriptable CLI - see Platform Control Utility section below
- Modified PSU firmware available for special requirements - please contact us

Technical Specifications (cont.)

Power Consumption Measured at 12V DC, base-spec CQ20 (Atom x6425E, 8 GB RAM, 256 GB SSD, Windows 11):

- Startup peak: 1.6A / 19.2W
- Idle at desktop: 0.75A / 9W (average)
- Stress test peak: 1.45A / 17.4W

Final consumption depends on configured options and application workload. Contact us for figures relating to a specific build.

Platform Control Utility (PCU)

Overview **PCU (Platform Control Utility)** is our in-house management software for In-CarPC vehicle PCs. Configure the vehicle power sequence in software. Developed and maintained by In-CarPC. Ships pre-installed on every CQ20 at no extra cost.

Ignition Timing - Startup The CQ20 power sequence is governed by four timers stored on the PSU microcontroller (MCU). All four are read and written through PCU, from the desktop GUI or the CLI.

Startup (ignition ON):

- **Anti-Crank Delay** - waits after the ignition signal goes high before powering the PC. Prevents boot during brief engine cranking voltage dips. Configurable 1 to 60 seconds.
- **Boot Delay** - waits after the anti-crank period before asserting the software power-on signal to the motherboard. Allows PSU rails to stabilise. Configurable 1 to 60 seconds.

Ignition Timing - Shutdown

Shutdown (ignition OFF):

- **Shutdown Delay** - the time the OS gets to shut down gracefully after the ignition is removed. The MCU signals the OS, then waits this period before cutting power. Configurable 3 seconds to 2 hours.
- **Force Off Timeout** - if the OS has not powered down by the end of the shutdown delay, the MCU hard-cuts power after this additional timeout. Protects the vehicle battery against drain from a hung OS. Configurable 10 seconds to 2 hours.

Technical Specifications (cont.)

Power Sequence Summary

Ignition on: anti-crank delay -> boot delay -> PC powers on.
Ignition off: shutdown delay (graceful OS shutdown) -> force off timeout (hard cut if the OS is still running).
 All four values are stored on the MCU. Configuration survives OS reinstall and image redeployment.

Example Configurations

Typical timer settings by deployment type:

- **Emergency response and search & rescue control vehicles** - long shutdown delay (5 to 10 minutes) so dispatch consoles, comms and mapping stay live with the engine off at scene
- **Airside ground services** (baggage tugs, refuellers, push-back tractors) - short anti-crank and short shutdown delay for frequent stop-starts, with a tight force-off timeout to protect the battery across many cycles per shift
- **Fuel and tanker fleets** - moderate timers with a longer shutdown delay for end-of-route data sync before depot park-up
- **Cold-weather operations** (gritters, refrigerated transport, mountain rescue) - longer anti-crank delay to handle slow diesel cranking on cold mornings

Replaces BIOS-Level Setup

Traditional in-vehicle PCs require BIOS access at install time to set ignition timing. PCU removes that step:

- Configure timers from the running OS, with the PC mounted in the vehicle
- No keyboard, monitor or POST screen required at install
- Repeat the same configuration across a fleet without manually entering BIOS on each unit
- Adjustments after deployment can be applied remotely without a service visit

Power Sequence Visualisation

The GUI includes a visual timeline showing the anti-crank, boot, shutdown and force-off stages scaled to the timer values you set. Verify timing before deploying to vehicles.

GUI Application

Desktop application for hands-on use on the bench or in the workshop:

- Point-and-click configuration of all four ignition timers
- Live readback of timer values from the PSU MCU
- Confirmation dialog on every write to prevent accidental fleet-wide changes
- Visual power sequence timeline for verifying settings before deployment
- Read-only mode for status checks without write risk

Technical Specifications (cont.)

Command Line Interface

Equivalent CLI for scripting, automation and fleet rollouts. Same operations as the GUI, exposed as a command-line tool:

- Get and set all four ignition timers from the command line
- JSON output mode for parsing by other tools and scripts
- Standard exit codes for shell scripting
- Read-only and read-write operating modes
- Quiet mode for batch operations
- Single binary with no external dependencies
- Compatible with PowerShell, bash, sh and any provisioning agent that can invoke an executable

Fleet Provisioning & Integration

Typical workflows using the PCU CLI:

- Apply per-vehicle settings post-imaging via PowerShell, bash or your imaging tool's scripting layer
- Trigger remote configuration changes from existing MDM, RMM or fleet management agents
- Capture per-unit configuration snapshots for asset records or audit
- Roll changes out across a deployed fleet without site visits

Runs locally on each PC. There is no PCU server or cloud component to deploy.

Cross-Platform Support

Same feature set across all supported platforms:

- Windows 10 (Pro, IoT, LTSC, Enterprise)
- Windows 11 (Pro, IoT, LTSC, Enterprise)
- Ubuntu 22.04 LTS and 24.04 LTS
- Debian 11, 12 and 13
- Other Linux distributions available on request

Safety & Consistency

- Confirmation dialog on every change in the GUI
- Two-step apply for changes to ignition timers
- Live readback after every write confirms the value reached the MCU
- OS loading guard timer prevents accidental shutdown attempts before boot completes
- Configuration stored on the PSU MCU - settings survive OS reinstall and image redeployments
- Read-only mode available for safe status checks

Licensing & Updates

Ships pre-installed on every CQ20. No additional licence fees or subscription. Updates published by In-CarPC and available through UK support.

Technical Specifications (cont.)

Operating System

Microsoft Windows

- Windows 10 Pro, IoT, LTSC, Enterprise
 - Windows 11 Pro, IoT, LTSC, Enterprise
- OS image preparation, custom imaging and pre-installation services available.

Linux

- Ubuntu 22.04 LTS, 24.04 LTS
- Debian 11, 12, 13
- Other distributions available on request

Mechanical

Construction

Aluminium alloy chassis with integrated heat fins. Passively cooled (fanless), with no moving parts and no air filters.

Mounting

- Side mount kit (supplied as standard)
- VESA mount kit (optional)
- DIN rail kit (optional)

Cooling

Passive cooling (fanless). Should be installed in a location that allows cooling air to flow freely over the chassis fins.

Dimensions

- Width: 150 mm
- Depth: 105 mm
- Height: 49 mm

Weight

0.9 kg (base specification)

Technical Specifications (cont.)

Environmental & Reliability

Operating Temperature

-40°C to +70°C at base specification with extended-temperature RAM and SSD.

Using standard RAM restricts the range to 0°C to +70°C. Using a standard SSD restricts the range further. Some optional features also restrict the operating temperature range - for the range of a specific configuration, please contact us.

Storage Temperature

-40°C to +85°C

Relative Humidity

5% to 95% (non-condensing)

Vibration & Shock

- Vibration: 5-500 Hz, 1.5 Grms with SSD, per IEC 60068-2-64
- Shock: 20G peak acceleration (11 ms duration) with SSD, per IEC 60068-2-27

Certifications & Warranty

Certifications

Certified for use in commercial vehicles, defence, emergency services and government deployments.

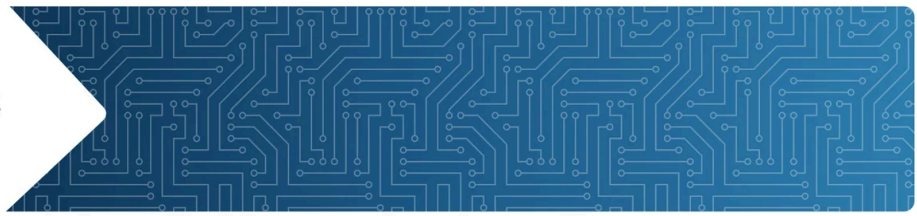
- **CE** (European Conformity)
- **FCC Class A**
- **UKCA** (UK Conformity Assessed)
- **E11 ("E-mark")** - approved for in-vehicle use when supplied as an In-CarPC CQ20 vehicle PC, built, configured and labelled under In-CarPC's approved production process. Approval number 10R-054687. Certificate available on request. Confirm scope at the time of order.

RoHS / WEEE

RoHS Compliant. In-CarPC is a registered member of a WEEE compliance scheme (WEE/JB0292UQ).

Warranty

- **2 years return-to-base** as standard
- Extendable to 3 or 5 years if required
- UK service and support throughout the warranty period
- Out-of-warranty repair and refurbishment also available



Technical Specifications (cont.)

Estimated End of Life (EoL) Date	2031 This is the earliest date at which we expect to stop producing new units of this PC model. The warranty for each PC will remain in place regardless of whether the EoL date has passed, and will continue for the duration of the original warranty period.
---	--

Model Numbers

CQ20-[RAM code]-[Drive code]-[Optional model codes]

Code	Meaning
RAM Code	Amount of RAM in GB (e.g. 8, 16, 32)
Drive Code	Drive capacity in GB with suffix: SMN (SATA SSD normal temp), SME (SATA SSD extended temp), NVN (M.2 NVMe normal temp), NVE (M.2 NVMe extended temp)
U12	4G LTE Cat 7 with multi-constellation GNSS (M.2 B-Key)
U14	5G NR Sub-6 GHz with dual-frequency L1+L5 GNSS (M.2 B-Key)
W21	Wi-Fi 7 / Bluetooth 5.4, M.2 2230 E-Key module fitted via adapter to mini PCIe slot (commercial temp 0°C to +80°C)
W22	Wi-Fi 7 / Bluetooth 5.4, M.2 2230 E-Key module fitted via adapter to mini PCIe slot (industrial temp -40°C to +85°C)

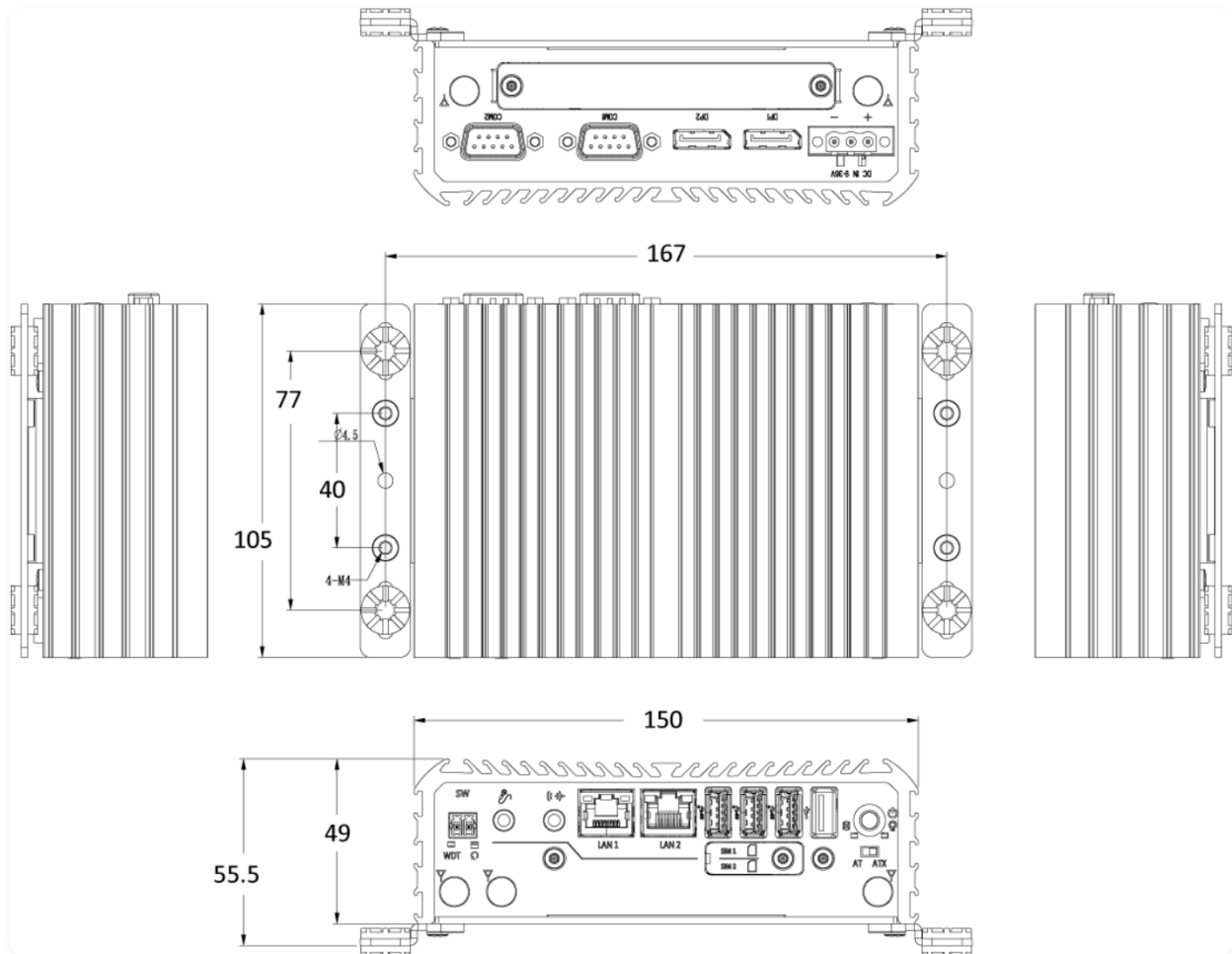
Example: Model code CQ20-16-512NVN-U14W22 denotes a CQ20 with 16 GB RAM, 512 GB normal-temperature NVMe SSD, 5G cellular module and extended-temperature Wi-Fi 7 / Bluetooth 5.4. Where multiple optional codes are present they are listed one after the other without any spacing.

Specifications are subject to change without notice. E&OE.

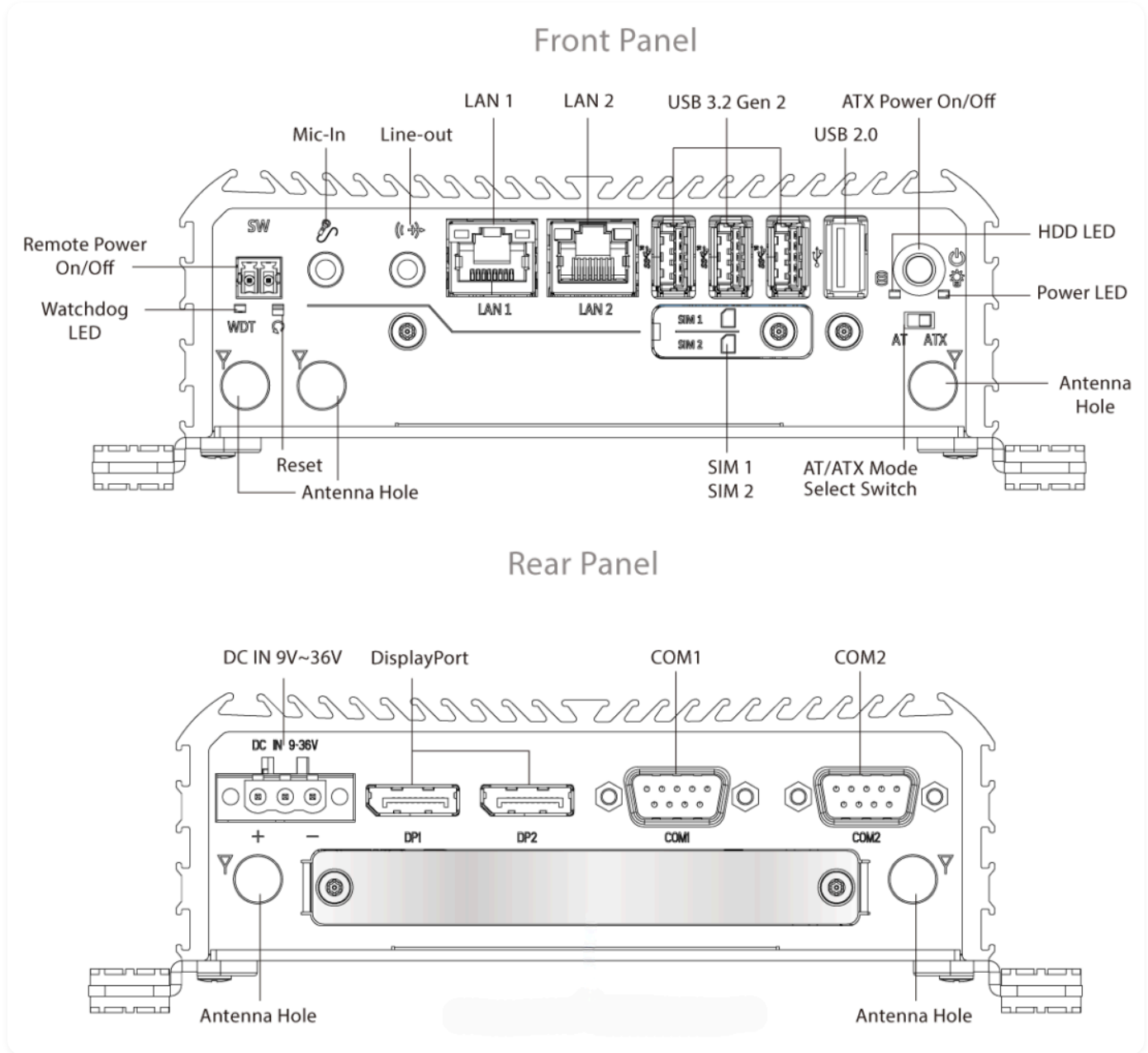
All trademarks and product names mentioned are the property of their respective owners.

Copyright 2026 Bowmonk Ltd. In-CarPC is a division of Bowmonk Ltd.

Dimensions (mm)



Port Layouts



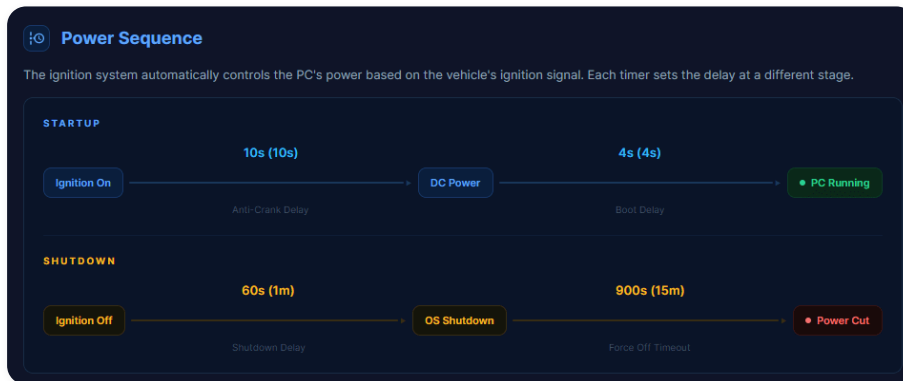
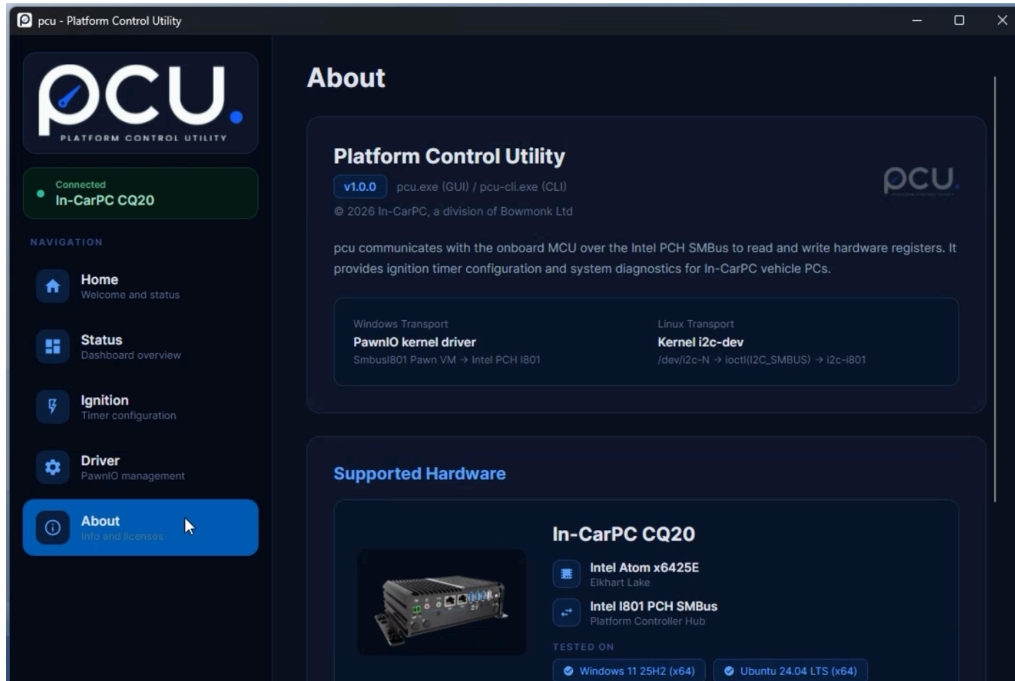
Product Gallery



Product Gallery (cont.)



Product Gallery (cont.)



Product Gallery (cont.)

```
PS C:\Users\Administrator\Desktop> .\pcu-cli.exe

PCU

Platform Control Utility v1.0.0
In-CarPC, a division of Bowmonk Ltd

Configure ignition timers, read hardware status,
and manage MCU settings on In-CarPC vehicle PCs.

Commands:
[1] Status      All available readings
[2] Ignition    Timer configuration
[3] Driver      PawnIO driver management
[h] Help        Show CLI usage
[0] Exit

Select:
```