EQIO

WJ-T10HX

PRODUCT MANUAL

10.1-inch Intel Handheld Control Terminal

Intel Core i7-1165G7



Appearance reference (generated from product photos); shipped units may differ.

Measurement and control, made easy.

Easy · Quick · Input · Output

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01 OVERVIEW

10.1-inch Intel Handheld Control Terminal

Control terminal · Mobile control · Inspection · Security and rescue · Intel

WJ-T10HX uses Intel Core i7-1165G7 processor, configured with 8 GB DDR4 memory and 128GB SSD, equipped with 10.1-inch capacitor touchscreen and has line, wireless communications I/O, used for mobile control, information processing and field display.
Housing at the same time settings Gigabit and 100 Mb Ethernet, RS-232 and RS-422 signal and Micro HDMI output, convenient connect instrument and external display. Built-in RTC, Wi-Fi and Bluetooth, can used for mobile operation unit and equipment operation terminal. Can as portable field operation terminal.



Multi-angle reference (generated from product photos); shipped units may differ.

Key features

- Core i7-1165G7 processor
- 8GB DDR4 and 128GB SSD
- 10.1-inch capacitor touchscreen
- Gigabit Ethernet and 100 Mb Ethernet connect
- Wi-Fi, Bluetooth and RTC

Applications

Mobile control

Inspection

Security and rescue

02 FUNCTIONS

Functions and engineering value

Intel handheld compute platform

Terminal uses 11 generation Core i7-1165G7 processor, configured with 8 GB DDR4 memory and 128GB SSD. 10.1-inch capacitor touchscreen provides field operator UI, suited to deployment via verification compatible x86 application, specific operating system and application software must follow project configured with confirm.

Dual network and industrial serial connect

Independent Gigabit and 100 Mb Ethernet I/O can respectively attach different device network, multiplexed circular connector brought out RS-232, RS-422, 2-ch USB2.0 HOST and headset signal. Such composite connect has to centralized routing, system integration when first check circular connector pinout and peripherals signal level.

Wireless maintenance and portable use used

Built-in Wi-Fi, Bluetooth and with battery RTC, standard Type-C and Micro HDMI used for peripherals and display expansion. Bare unit no more than 1.7kg, source data gives commercial temperature full charge playback single channel 1080P video more than two hours, actual operating condition runtime must follow load verify.

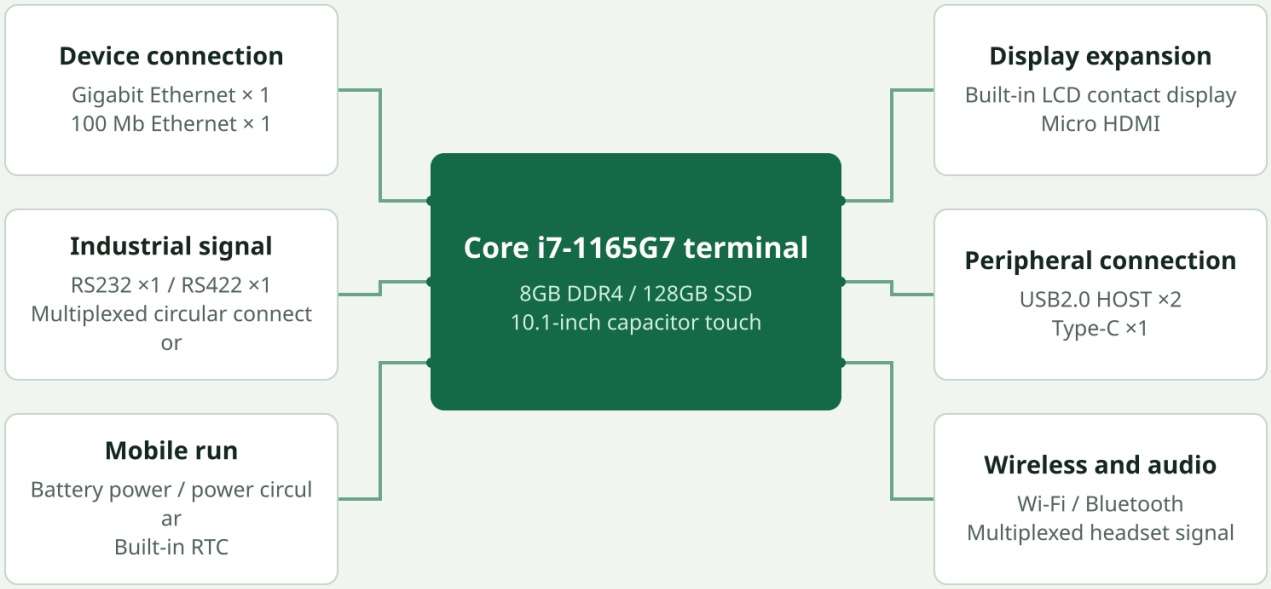
The functional notes explain the product’s role from published configuration. Optional functions, software and peripherals follow the project definition. Chip capability is not the same as implemented I/O.

03 ARCHITECTURE

Product functional architecture

FUNCTIONAL BLOCK DIAGRAM

WJ-T10HX



Functional relationships · lines do not show internal circuits, pins or dedicated bus topology

From published specification illustrative functional grouping, does not show internal circuits, on-board bus or signal routing; I/O direction actual protocol shall prevail.

Platform and I/O

Uses Intel Core i7-1165G7, product configured with 8 GB DDR4 and 128GB SSD. Vendor device data lists Tiger Lake architecture, 4-core8 threads, 12MB cache and up to 4.70GHz turbo; turbo processor capability, continuous performance from terminal power consumption, cooling and actual load determines.

> **Reading the diagram**
>
> Solid lines show published functional relationships, not on-board buses, bridge chips or connector pins. Optional controllers, radios, storage and software follow the configuration and interface files.

04 SPECIFICATIONS

Technical specifications

Compiled from published product data. Batch, I/O and environmental ratings follow the order confirmation.

Core system

Processor	Intel®Core™11 generation i7-1165G7 processor
Capacity	Memory 8GB DDR4, storage unit capacity 128GB SSD
Display and touch	10.1-inch LCD display, capacitor touchscreen

Mechanical specifications and system requirements

Dimensions / weight	380mm (L) × 240mm (W) × 48mm (H), not includes joystick height, weight≤1.7kg (only bare unit)
Environmental ratings	Operating temperature: -20°C~55°C, storage temperature: -45°C~60°C
Battery	Commercial temperature full charge status only battery power when, playback 1-ch1080P video, operation time＞2 hours

I/O and expansion

External port	Power circular connector I/O*1, Gigabit network I/O*1, 100M network I/O*1, serial/USB/headset microphone multiplexed circular connector I/O output 1-ch RS-232 signal*1, 1-ch RS-422 signal*1, USB2.0 HOST signal*2 standard Type-C I/O*1, Micro HDMI I/O*1
Clock function	Supports RTC, built-in battery
Wireless Bluetooth function	Has Wifi&BT module

05 COMPONENTS

Processor and device specifications

Device figures come from vendor publications and describe the chip or module. The implemented product follows the specification tables. Optional devices are supplied with the selected configuration.

Intel i7-1165G7

Micro architecture codename	Tiger Lake
Manufacturing process	10 nm SuperFin
CPU core number	4
CPU threads number	8
Up to turbo	4.70 GHz
Shared cache	12 MB Intel® Smart Cache
CTDP-up should be based on frequency	2.80 GHz
CTDP-up power	28 W
CTDP-down should be based on frequency	1.20 GHz
CTDP-down power	12 W

Intel i7-1165G7 (continued)

CPU memory controller capacity upper limit	64 GB
CPU memory controller supports type	DDR4-3200, LPDDR4x-4267
Memory channel number	2
CPU ECC supports	Not supports
Integrates graphics unit	Intel® Iris® Xe Graphics
IGPU up to dynamic frequency	1.30 GHz
IGPU actuation unit	96
Chip supports display quantity upper limit	4

05 COMPONENTS

Processor and device specifications (continued)

Intel i7-1165G7 (continued)

Chip display output protocol	eDP 1.4b, MIPI-DSI 2.0, DP 1.4, HDMI 2.0b
Processor PCIe version	Gen 4
PCH side PCIe version	Gen 3
Package	FCBGA1449
Package dimensions	45.5×25 mm
VT-x virtualization	Supports
VT-d directional I/O virtualization	Supports
Quick Sync video acceleration	Supports
Command width	64-bit

Sources: Intel, Intel i7-1165G7 Processor Specifications.

06 GALLERY

Appearance and scene

Reference views



Product appearance reference; shipped units may differ.

Scene



Application illustration (not a product photo).

07 APPLICATIONS

From product capability to applications

Mobile equipment control

10.1-inch contact display can hosts equipment operation and status display UI, RS-232/RS-422 used for connect supports should protocol field equipment. Intel platform facilitates evaluate both has x86 application adapts conditions, delivery should first verification touch layout, driver and control software run stability.

Instrument inspection and maintenance

Can via Gigabit or 100 Mb Ethernet attach instrument, combined with USB, industrial serial read status and settings parameters, Wi-Fi and Bluetooth compatible equipment provides wireless connect method. RTC has to application organize time log, but equipment between time synchronous requires additionally definition.

Portable field information station

Terminal itself completes touch operation, Micro HDMI can connect large display supply field personnel together view, Type-C used for compatible peripherals. Battery power supports point position between mobile, suited to temporary service workstation and field log, different wireless and peripherals combination power consumption should include used arrangement.

Integration checks

Application compatible	Confirm operating system, x86 application and contact display, network, serial driver version.
Multiplexed circular connector	Check RS-232, RS-422, USB HOST and headset signal pinout and wiring harness.
Dual network deployment	Stated Gigabit and 100M I/O attach network and address planning.
Mobile power	Application load under measured runtime; operating temperature per -20–55°Cconfirm.

08 CONFIGURATION

Configuration, options and selection

Configuration

Provides Type-C and composite circular connector I/O; battery power playback single channel 1080P video can operation more than two hours.

Selection guide

Order confirmation	Batch, I/O and environmental ratings follow the order confirmation
Published data	Compiled from published product data; EQIO provides selection and system integration
Configuration talk	Share the application, I/O count, environment and software so a configuration can be proposed

Request a quotation and selection support

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EQIO

Easy · Quick · Input · Output

BRAND

Measurement and control, made easy.



EQIO product family · concept rendering

Brand story

EQIO builds measurement and control products and systems. The name stands for Easy Quick Input Output: Easy is a clear structure that is quick to learn, Quick is a direct path to efficient delivery, and Input / Output is every link between the device under test and the control system.
The soft single-cycle wave inside the Q links the brand to signals, acquisition and I/O. “Measurement and control, made easy” is our promise for every selection, integration and delivery.

What we do

Products

Data acquisition, test instruments, control and I/O, modular platforms, software, cables

Systems

Configured to the measurand, channels, accuracy and software, from design to commissioning

Support

Selection advice, training, maintenance and calibration

How we deliver

01
Requirements

02
Solution design

03
Build & integration

04
Factory test

05
Delivery & training

06
Ongoing support

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