EQIO

WJ-T10DX

PRODUCT MANUAL

Portable Dual-Display Control Terminal

RK3588 / Intel processor platform (optional)



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

Measurement and control, made easy.

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Easy · Quick · Input · Output

01 OVERVIEW

Portable Dual-Display Control Terminal

Control terminal · Unmanned systems ground control · Inspection · Security and rescue

WJ-T10DX uses handheld end and wearable backpack end combination split structure, equipped with on flip-down cover dual display and multi type peripheral I/O, supports mobile control, video display and data HMI, suited used for unmanned systems ground control, inspection and field operation. Handheld end settings Gigabit Ethernet, DP, USB and AV interfaces, wearable backpack end settings communications and positioning antenna connect. Standard 8GB memory and 128GB storage, facilitates organize operator UI, video video and field data.



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

Key features

- On folding flip-down cover dual display
- 600cd/㎡display brightness
- 8GB memory and 128GB storage
- Gigabit Ethernet, DP and USB connect
- Handheld end and wearable backpack end split structure

Applications

Unmanned systems ground control

Inspection

Security and rescue

02 FUNCTIONS

Functions and engineering value

Split dual display operation layout

Handheld end and wearable backpack end uses split combination, on folding flip-down cover dual display can assign operator UI, video video and status information. Display resolution at least 1920 × 1080, brightness 600cd/▯, suited to requires expand readable area while still retain mobile operation method task.

Handheld end peripherals aggregation

Handheld end provides USB3.0, USB2.0, Gigabit RJ45, DP and 3.5mm audio video composite I/O, can connect data peripherals and external display equipment. 2 circular connector and Wi-Fi/Bluetooth antenna I/O overall connect leave ingress, wiring harness definition should follow specific delivery solution confirm.

Platform selection and wearable backpack power

Compute platform provides RK3588 or Intel solution, standard 8GB memory and 128GB storage. Wearable backpack end settings 5G, RTK positioning antenna I/O, and uses lithium battery power and external adapter charging; processor, communications and positioning module specific combination required selection when confirm.

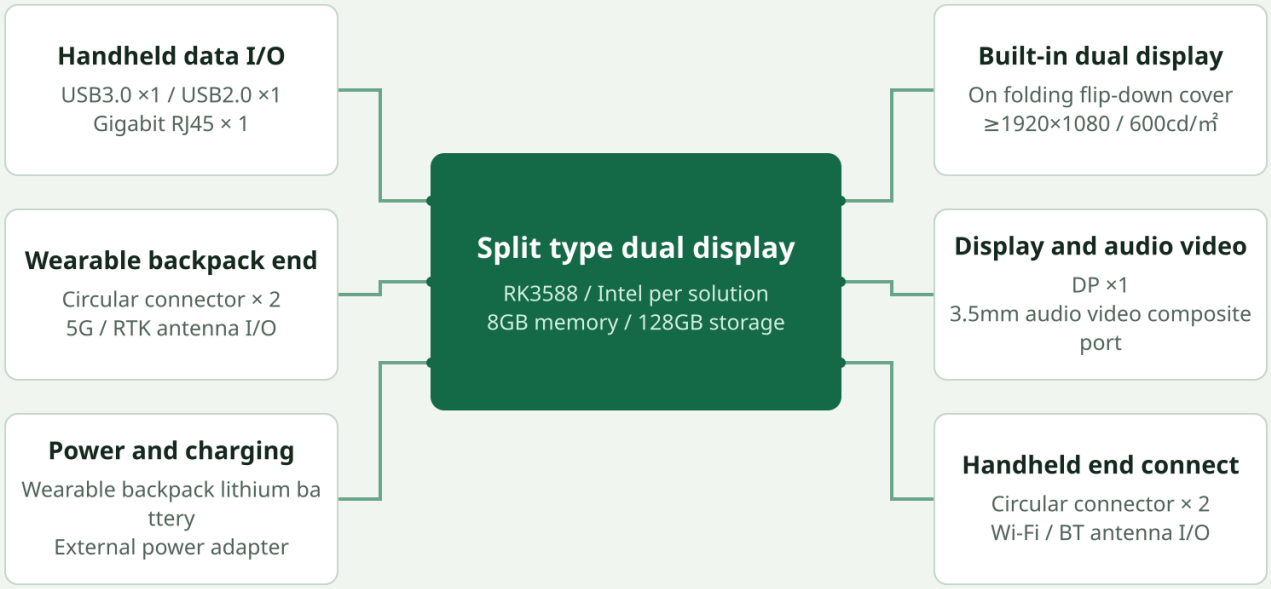
The functional notes explain the product’s role from published configuration. Optional functions, software and peripherals follow the project definition. Chip capability is not the same as implemented I/O.

03 ARCHITECTURE

Product functional architecture

FUNCTIONAL BLOCK DIAGRAM

WJ-T10DX



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. Processor platform different configured with, antenna I/O not represent should communications or positioning module all standard.

Platform and I/O

Provides RK3588 and Intel compute platform solution, standard 8GB memory and 128GB storage. RK3588 device data only suited used for the option version, not cannot apply used for Intel version; source data not gives Intel specific model, should selection confirm rear complete CPU and operating system detail.

> **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	RK3588/INTEL high-performance processor
Capacity	Standard memory 8GB+128GB storage
Display	On folding flip-down cover dual display; resolution≥1920 × 1080; brightness 600cd/㎡

Mechanical specifications and system requirements

Dimensions / weight	＜2.8kg (not including battery, not including wearable backpack end)
Environmental ratings	-20°C~60°C (operating temperature), -30°C~70°C (storage temperature), environment humidity 95%±3%
Battery	Wearable backpack lithium battery power+external power adapter charging dual mode

I/O and expansion

Handheld termination port	Circular connector*2, USB3.0*1, USB2.0*1 RJ45 Gigabit Ethernet port*1, DP HD I/O*1, 3.5mm audio video composite port*1, WIFI/BT antenna I/O*1
Wearable backpack termination port	Circular connector*2, 5G antenna I/O*1, RTK positioning antenna I/O*1

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.

Rockchip RK3588 (Optional)

Manufacturing process	8 nm
CPU architecture	4 × Arm Cortex-A76 + 4 × Arm Cortex-A55, 64-bit 8-core
Clock reference	Up to 2.4GHz
Graphics processor	Arm Mali-G610 MC4, integrates 2D graphics acceleration
Graphics and compute API	OpenGL ES 3.2；Vulkan 1.1；OpenCL 2.0
NPU rated peak	6 TOPS
NPU structure and accuracy	3-core NPU; supports INT4/INT8/INT16/FP16/BF16/TF32
Memory controller	LPDDR4/LPDDR4X/LPDDR5, 4-channel × 16bit
L3 cache	3 MB
Native storage interfaces	eMMC 5.1、SD3.0/MMC4.5

Rockchip RK3588 (Optional) (continued)

PCIe3.0-channel combination	1×4 / 2×2 / 4×1
Native Gigabit Ethernet MAC	2-ch
Native low-speed controller	10×UART、6×SPI、9×I2C
Video decode upper limit note	H.265/H.264/AV1/AVS2 etc.format, up to 8K@60fps, per en code format and code stream configured with
Video encode upper limit	H.264/H.265 up to 8K@30fps
Chip display interfaces	EDP, DP, HDMI2.1, MIPI, multi-display display engine
Video input	MIPI CSI-2/DVP; HDMI2.0 RX up to 4K@60fps

Sources: Rockchip, Rockchip RK3588 official product specification; Rockchip, RK3588 Brief Datasheet V1.0 2025-08-28; Rockchip, Rockchip Toybrick TB-RK3588X development board released.

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

Unmanned systems ground display-control

On under dual display can respectively display operation page and telemetry or video information, handheld end via network and USB attach ground control system. Wearable backpack end handles power and related connect, facilitates operation equipment surrounding mobile; control software and communications module must follow target equipment adapts.

Mobile inspection information terminal

Inspection when can one display view task or equipment list, another display present graphics and status data, reduce page switch. Gigabit Ethernet, DP and USB facilitates temporary bring-up, handheld end less than 2.8kg weight aperture not includes battery and wearable backpack end, portable use planning required into complete combination.

Field rescue information coordination

Dual display structure can used for present field information, field graphics and equipment status, wearable backpack power supports mobile operation method. 5G and RTK antenna I/O can together with selected communications, positioning solution used, actual covers, positioning accuracy and application interlock capability depends on to installed module and software.

Integration checks

Compute version	Stated select RK3588 or Intel, and confirm should system, driver and application compatible.
Split connect	Confirm handheld end and wearable backpack end circular connector pinout, cable length, should place and connect method.
Complete set weight	Less than 2.8kg only not including battery and wearable backpack end weight aperture.
Power and antenna	Check wearable backpack battery, adapter and 5G/RTK module and antenna shipped with the unit range.

08 CONFIGURATION

Configuration, options and selection

Configuration

Provides Rockchip or Intel compute platform solution; uses wearable backpack lithium battery and external adapter power.

Processor platform	RK3588 / Intel

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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