

iMCS integrated PXle Measurement & Control System

HW-1363i(G3)

Built-in ultra-long-life smart lithium battery
Compliant with PXle/PXI bus standard specifications
Built-in HOUWU® PXle-9170 controller
Built-in HOUWU® 3U 6-slot PXle Gen3.0 high-speed backplane
One 3U PXle system slot and five 3U PXle/PXI hybrid expansion slots
System slot bandwidth 16GB/s
Each expansion slot has a dedicated bandwidth 8GB/s
Compatible with PXle/PXI modules such as data acquisition, modular instruments, aviation bus, FPGA, etc.
Built-in system status monitoring and management software HMCSP
Built-in smart lithium battery monitoring and management software HBSSM
All aluminum-magnesium alloy reinforced compact design
Special impact resistant corners and reinforced metal handle design
13.3" high-definition industrial display with 1920x1080 resolution
Multi-point capacitive touch screen or resistive touch screen
9V~32V DC power supply wide voltage input (with dedicated 24V power adapter)
Power input with aviation connector design



HW-1363i方案

The industry's first high-performance 3U 6-slot PXle ruggedized integrated

HW-1363i(G3) is the industry's first 13.3" PXle ruggedized integrated with built-in Intel® Core™ 6th or 9th Gen i7 Quad-core eight-thread, six-core twelve-thread CPU, embedded PXle controller, PXle backplane, smart lithium battery, high-definition industrial display and ruggedized chassis. This PXle integrated adopts professional industrial appearance design, all aluminum-magnesium alloy structure reinforced compact design, integrated 13.3" high-definition industrial display, multi-point capacitive touch screen or resistive touch screen and smart lithium battery, etc. It has the characteristics of high integration, robustness, portability, and is suitable for various harsh indoor and outdoor environments or complex working conditions where test equipment needs to be portable and mobile.

HW-1363i(G3) built in high-performance HOUWU® 3U 6-slot PXle high-speed backplane, based on PCIe Gen3.0 technology, in compliant with PXle/PXI bus standard specifications, with one 3U PXle system slot and five 3U PXle/PXI hybrid expansion slots (compatible with PXle and PXI modules). The system slot bandwidth is 16GB/s, each expansion slot has a dedicated bandwidth 8GB/s, compatible with PXle/PXI modules such as high-speed data acquisition, high-speed digitizer, digital multimeter, aviation bus, FPGA, RF and switch modules. The machine has built-in system status monitoring and management software HMCSP, which can monitor the voltage of each power supply, chassis internal temperature and fan speed in real time, and supports PWM fan speed control. According to the high and low temperature inside the chassis, the fan speed is adaptively adjusted to dissipate heat for the controller and modules. The machine has built-in smart lithium battery monitoring and management software HBSSM, which can monitor all status parameters of the smart lithium battery in real time, including battery voltage, charging and discharging current, real-time power, battery life, charging and discharging times, etc.

HW-1363i(G3) makes full use of the characteristics of PXle/PXI bus, such as stability, reliability, good compatibility, solid structure, large data throughput, high performance. According to the different project applications, this PXle integrated can be built with various PXle/PXI modules to realize the test and measurement of microwave, radio frequency, high-speed digital, signal simulation, prototype validation, voltage, current, temperature, frequency, stress, strain, vibration, shock, audio, video and various aviation bus, etc. Users can quickly build various measurement, test and control system on this portable measurement & control platform, which is suitable for military defense, aerospace, weapons, electronics, ships and other field actual combat applications and scientific experimental research occasions.

Operating System	Windows® 7 (Option 1, Option 2) Windows® 10 (Option 1, Option 2, Option 3, Option 4)
CPU	Intel® Core™ 6 th Gen i7-6822EQ 2.0GHz (8MB Cache, up to 2.8GHz) Quad-Core, Eight-Thread (Option 1) Intel® Core™ 6 th Gen i7-6820EQ 2.8GHz (8MB Cache, up to 3.5GHz) Quad-Core, Eight-Thread (Option 2) Intel® Core™ 9 th Gen i7-9850HL 1.9GHz (9MB Cache, up to 4.1GHz) Six-Core, Twelve-Thread (Option 3) Intel® Core™ 9 th Gen i7-9850HE 2.7GHz (9MB Cache, up to 4.4GHz) Six-Core, Twelve-Thread (Option 4)
RAM	16GB DDR4 (upgradeable to 32GB/64GB)
Storage	Original dual solid state drive SSD design: 1, NVMe 500GB SSD x1 (system disk) (upgradeable to 1TB/2TB/4TB) 2, 2.5" SATA3.0 1TB SSD x1 (data disk) (upgradeable to 2TB/4TB/8TB)
Link Configuration	PXle-9170 Controller PCIe Gen3.0 Specification 2 Link: PCIe3.0 x8 + PCIe3.0 x8
LCD	13.3" high-definition industrial display with 1920x1080 resolution
Touch Screen	Multi-point capacitive touch screen / Industrial resistive touch screen (optional)
Backplane	3U 6-slot PXIe backplane based on PCIe Gen3.0 technology 1 PXIe system slot and 5 PXIe/PXI hybrid expansion slots System slot bandwidth 16GB/s, each expansion slot has a dedicated bandwidth 8GB/s
IO	LAN x2, USB3.0 x4, USB2.0 x2, RS232 x1, DP x2, VGA x1, SMB x1, RESET x1, LED x4
Heat Dissipation	The fan supports PWM operation mode, adaptive speed regulation, active heat dissipation, and complies with PXIe/PXI bus standard specifications.
Battery	Smart lithium battery 150WH (upgradeable to 300WH)
Power Supply	9V~32V DC wide voltage input, aviation connector design With dedicated power adapter: input AC 100V~240V, output DC 24V Rated load power 200W
Environment	Operating temperature: 0°C ~ 50°C (normal level) Operating temperature: -10°C ~ 55°C (industrial level) Storage temperature: -40°C ~ 70°C Relative humidity: 5% ~ 95% (no condensation)
Shock Resistance	30G peak, half-sine, 11ms pulse
Vibration Resistance	2.4Grms@5~500Hz (1 hour each in X, Y, Z directions)
Dimension	352 x 264 x 149 mm (excluding corners and handles)
Weight	8.3KG (including HOUWU® PXIe-9170 controller,150WH smart lithium battery)
Packaging	Customized aviation trolley case
Category	nMCS, integrated PXIe Measurement & Control System

[Note: Due to regular product upgrades, for more updated and accurate specifications and onfiguration information, please contact HOUWU TECHNOLOGY at +86-755-29982022.](#)