

DrillVision Rugged Hi-Temp Server

Driller's Servers for any application!



Driller's
Choice!

Rugged Harsh Environment High Temperature Server



DrillVision™'s Harsh Environment High Temperature Server is a tough, video recording PC that is designed to go wherever you need it and is manageable from wherever you are. Hardened out-of-the-box, it's designed to withstand extreme temperature conditions from -40°C to $+70^{\circ}\text{C}$ (-40°F to 158°F) without requiring additional heating or air conditioning systems.

The system is designed to operate in environments where other computers cannot exist. The fanless nature of the system protects it from dust, airborne particles and even chemical or moisture ingress. Featuring rugged construction, fanless/cable-less/jumper-less design, wide operating temperature (-40 to $+70^{\circ}\text{C}$), wide range DC power input (9~48 VDC), high tolerance to vibration and shock (5/50 Grms), the DX-1100 is maintenance-free and ideal to be deployed in harsh environments. The unit has a dual hot-swap 2.5" HDD/SSD tray with RAID function. The PC can be configured instantly with Power over Ethernet and power ignition sensing functions to be applied in many industrial applications, such as machine vision, in-vehicle transportation, and mobile surveillance. All of these factors combine to create a server that's purpose-built for 24/7 operation.

Optional
Rugged
Enclosure



Specifications

System	Processor	<ul style="list-style-type: none"> • Xeon: <ul style="list-style-type: none"> Intel® Xeon® E-2176G Hexa Core up to 4.7 GHz - 12M Cache, TDP 80W Intel® Xeon® E-2124G Quad Core up to 4.5 GHz - 8M Cache, TDP 71W • Core i: <ul style="list-style-type: none"> Intel® Core™ i7-8700 Hexa Core up to 4.6 GHz - 12M Cache, TDP 65W Intel® Core™ i5-8500 Hexa Core, up to 4.1 GHz - 9M Cache, TDP 65W Intel® Core™ i3-8100 Quad Core 3.6 GHz - 6M Cache, TDP 65W Intel® Core™ i7-8700T Hexa Core up to 4.0 GHz - 12M Cache, TDP 35W Intel® Core™ i5-8500T Hexa Core up to 3.5 GHz - 9M Cache, TDP 35W Intel® Core™ i3-8100T Quad Core 3.1 GHz - 6M Cache, TDP 35W • Pentium: <ul style="list-style-type: none"> Intel® Pentium® G5400 Dual Core 3.7 GHz - 4M Cache, TDP 58W Intel® Pentium® G5400T Dual Core 3.1 GHz - 4M Cache, TDP 35W • Celeron: <ul style="list-style-type: none"> Intel® Celeron® G4900 Dual Core 3.1 GHz - 2M Cache, TDP 54W Intel® Celeron® G4900T Dual Core 2.9 GHz - 2M Cache, TDP 35W
	Chipset	Intel C246
	Memory	<ul style="list-style-type: none"> • 2x DDR4-2666/2400 MHz SO-DIMM Sockets • Support up to 32 GB (Un-buffered and Non-ECC type) * i3/Pentium/Celeron: DDR4 2400 MHz
	Graphics	<ul style="list-style-type: none"> • Integrated Intel® UHD Graphics (Xeon: UHD P630; i7/i5/i3: UHD 630; Pentium/Celeron: UHD 610) • Supports Triple Independent Display (DVI-I/DisplayPort/HDMI)
	Audio	Realtek® ALC888, High Definition Audio
	BIOS	AMI 32 MB BIOS
I/O Interface	DVI	1x DVI-I Connector (VGA: 1920 x1080 @ 60 Hz; DVI-D: 1920 x1200 @ 60 Hz)
	DP	1x DisplayPort Connector (3840 x 2160 @30Hz)
	HDMI	1x HDMI Connector (3840 x 2160 @30Hz)
	LAN	2x GbE LAN (Support WoL, Teaming, Jumbo Frame, IEEE 1588v2 and PXE), RJ45 <ul style="list-style-type: none"> - GbE1: Intel® I219-LM - GbE2: Intel® I210-IT Optional Module <ul style="list-style-type: none"> · 4x 10/100/1000 Mbps, RJ45 Port · 4x 10/100/1000 Mbps, M12 Port
	PoE+	Optional Module <ul style="list-style-type: none"> · 4x PoE+, Individual port 25.5W (with CMI-LAN01, RJ45 Port) · 4x PoE+, Individual port 25.5W, (with CMI-M12LAN01, M12 Port)
	Serial Port	4x RS-232/422/485 with Auto Flow Control Support 5V/12V, DB9 Optional Module <ul style="list-style-type: none"> · 2x RS-232/422/485, DB9 Connector
	USB	2x USB 3.1 (Type-A) 6x USB 3.0 (Type-A)
	Optical Isolated DIO	Optional Module <ul style="list-style-type: none"> · 16x Optical Isolated DIO(8DI, 8DO), 20 pin Terminal Block
	Line-Out	1x Line-Out, Phone Jack 3.5mm
	Mic-In	1x Mic-In, Phone Jack 3.5mm
	Power Button	1x ATX Power On/Off Button
	AT/ATX Switch	1x AT/ATX Mode Switch
	Rest Button	1x Rest Button
	Clear CMOS Switch	1x Clear CMOS Switch
	Remote Power On/Off Connector	1x Remote Power On/Off Connector, 2-pin Terminal Block
	External FAN Connector	1x External FAN Connector, 4-pin Terminal Block (support smart fan by BIOS)

Specifications (Cont)

Storage	SSD/HDD	2x 2.5" Front Accessable SATA HDD/SSD Bay (SATA 3.0)
	mSATA	3x mSATA Socket (SATA 3.0, shared by Mini-PCIe socket)
	RAID	Supports S/W RAID 0, 1, 5 & 10
Expansion	PCI/ PCIe	-
	CFM (Control Function Module) Interface	1x CFM Interface for CFM Modules
	CMI (Combine Multiple I/O) Interface	3x CMI Interface for CMI Modules
	Mini PCI Express	3x Full-size Mini-PCIe Sockets
	M.2 Socket	1x M.2 2230 Socket (Key E)
	SIM Socket	1x SIM Socket
	Antenna Holes	3x Antenna Holes
Other	Instant Reboot	Support 0.2sec
	Power Ignition Sensing	Optional Module · CFM with Delay Time Management and Selectable 12V/24V, Dip Switch
	Super Cap	SuperCap Integrated for CMOS Battery Maintenance-free Operation
	Watchdog Timer	Software Programmable Supports 256 Levels System Reset
Power Requirement	Power Type	AT/ATX
	Power Input Voltage	9~48VDC
	Connector	3-pin Terminal Block
	Power Adapter	Optional AC/DC Adapter · AC/DC 24V/5A, 120W · AC/DC 24V/9.2A, 220W
Physical	Dimension (WxDxH)	242 x 174 x 77 mm
	Weight Information	3.6 kg
	Mechanical Construction	Extruded Aluminum with Heavy Duty Metal
	Mounting	Wall / VESA / DIN Rail / Side
	Unibody Design	Yes
	Fanless Design	Yes
	Jumper-less Design	Yes
Cable-less Design	Yes	
Protection	Reverse Power Input Protection	Yes
	Over Voltage Protection	58V
	Over Current Protection	15A
	ESD Protection	+/-15kV(Air), +/-8kV(Contact)
	Surge Protection	3.84 kV (impedance 12 ohm 1.2/50us waveform)
Operating System	Windows	Windows® 10
	Linux	Support by project
Environment	Operating Temperature	35W TDP Processor: -40°C to 70°C 54~65W TDP Processor: -40°C to 45°C 71~80W TDP Processor: -40°C to 40°C * PassMark BurnInTest: 100% CPU, 2D/3D Graphics (without thermal throttling) * With extended temperature peripherals; Ambient with air flow * According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14
	Storage Temperature	-40°C to 85°C
	Relative Humidity	95% RH @ 40°C (Non-condensing)
	Shock	Operating, 50 Grms, Half-sine 11 ms Duration * w/ SSD, according to IEC60068-2-27
	Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes * w/ SSD, according to IEC60068-2-64
	EMC	CE, FCC Class A
	Safety	LVD (EN60950-1)
	Railway	EN50155, EN50121-3-2
	In-Vehicle	E-Mark (E13) , Pending
	MTBF	407,391 Hours - Database: Telcordia SR-332 Issue3, Method 1, Case 3