## 6BK1800-1HA02-0AA0

**Data sheet** 

SIMATIC IPC1047 - GPU (Rack PC, 19", 4HE); 2x Intel Xeon CPU E5-2620v4; 4x 8 GB DDR4 ECC SDRAM; 1x System-SSD 480GB; 1x GPU NVIDIA P5000; 2x Gbit Ethernet, IPMI, RJ45; 1x VGA, 1x COM 1, TPM1.2; 2x USB 3.0, 2x USB rear side; 2x USB 3.0 front; WIN 7 Professional x64bit ATX Power Supply 860 Watt; temp.- and fan monitoring, SW RAID onboard



Mounting	For horizontal rack mounting
Design	Rack PC, 19", 4U
supply voltage	
Type of supply voltage	100/240V AC (autorange) 50/60 Hz
Line frequency	
<ul> <li>Rated value 50 Hz</li> </ul>	Yes
Rated value 60 Hz	Yes
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	20 ms
Processor	
Processor type	Xeon E5-2620 v4 (8C/16T, 2.1 (3.0) GHz, 20 MB cache)
Chipset	Intel PCH C612
Graphic	
Graphics controller	NVIDIA Quadro P5000, 2 560 cores, 16 GB DDR5
Drives	
Hard disk	1x 480 GB SSD
SSD	Yes
Memory	
Type of memory	DDR4-SDRAM DIMM
Main memory	32 GB, 2 400 MHz
Capacity of main memory, max.	2 Tbyte
Hardware configuration	
Slots	
• free slots	6 slots: 3x PCIe (x16), 3x PCIe (x8)
<ul> <li>Number of PCI slots</li> </ul>	6
nterfaces	
USB port	4x USB 3.0: 2x on rear, 2x on front; 2x USB 2.0: 2x on rear
ntegrated Functions	
Monitoring functions	
Temperature monitoring	Yes
Status LEDs	POWER, HDD, FAN Fail
• Fan	Yes
<ul> <li>Monitoring function via network</li> </ul>	Yes (per IPMI)

<ul> <li>Interference immunity against discharge of static electricity</li> </ul>	±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2
Interference immunity against high-frequency electromagne	etic fields
<ul> <li>Interference immunity against high frequency radiation</li> </ul>	10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6
Interference immunity to cable-borne interference	
Interference immunity on supply cables	±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric
<ul> <li>Interference immunity on signal cables &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-4, burst; ±2 kV acc. to IEC 61000-4-5, surge
Interference immunity on signal cables < 30m	±1 kV acc. to IEC 61000-4-4, Burst
Interference immunity against voltage surge	
<ul> <li>asymmetric interference</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge asymmetric
symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
Emission of conducted and non-conducted interference	
Interference emission via line/AC current cables	EN 61000-6-3, FCC Class A, EN 61000-6-4, CISPR 22, EN 55022 Class B, EN 61000-3-2 Class D, EN 61000-3-3
Degree and class of protection	
IP (at the front)	IP30
IP (rear)	IP20
Standards, approvals, certificates	
CE mark	Yes; For use in industrial areas as well as domestic, business and commercial environments (emitted interference: EN 61000-6-3:2007 +A1:2011, noise immunity: EN 61000-6-2:2005)
CSA approval	Yes
cULus	Yes
FCC	Yes
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
Dust protection	With front door closed: G2 EN 779, 99% of particles > 0.5 mm are filtered
Ambient conditions	
Ambient temperature during operation	
Ambient temperature during operation	0 to +40 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: $5\%$ to $85\%$ at $30$ °C (no condensation), storage / transport: $5\%$ to $95\%$ at $25$ / $55$ °C (no condensation)
Vibrations	
<ul> <li>Vibration resistance during operation acc. to IEC 60068-2-6</li> </ul>	Tested according to IEC 60068-2-6, 10 cycles; 20 to 58 Hz: 0.015 mm; 58 to 200 Hz: 2 m/s $^2$ (0.2 g)
Shock testing	
Shock load during operation	Tested according to IEC 60068-2-27; half-sine: 9.8 m/s² (1 g), 20 ms, 100 shocks per axis
Operating systems	
pre-installed operating system	Windows 7 Professional x64 bit
pre-installed operating system	
<ul><li>Windows 7</li></ul>	Yes
Dimensions	
Width	430 mm
Height	176.6 mm; 4U
Depth	572 mm
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