BM3400/S2
fanless

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Industrial Automation - Products & Configurations

BM3400/S2 D0 BASIC SYSTEM		POWER [W]
Basic Configuration	Intel® Celeron® dual core G3900E 2,40 GHz • 4GB RAM • fanless • **without predisposition to extractable drives** • 24V DC isolated power supply • 1 slot PCIe x4 + 1 slot PCI • UBIQUITY BASIC Win32/64 runtime • 12 month warranty	69

BM3400/S2 D1 BASIC SYSTEM		POWER [W]
Basic Configuration	Intel® Celeron® dual core G3900E 2,40 GHz • 4GB RAM • fanless • **with predisposition to 1 extractable drive in left position** • 24V DC isolated power supply • 1 slot PCIe x4 + 1 slot PCI • UBIQUITY BASIC Win32/64 runtime • 12 month warranty	69

BM3400/S2 D2 BASIC SYSTEM		POWER [W]
Basic Configuration	Intel® Celeron® dual core G3900E 2,40 GHz • 4GB RAM • fanless • **with predisposition to 2 extractable drives** • 24V DC isolated power supply • 1 slot PCIe x4 + 1 slot PCI • UBIQUITY BASIC Win32/64 runtime • 12 month warranty	69

	D0	D1	D2		POWER [W]
REMOTE ASSISTANCE	•	•	•	ASEM UBIQUITY BASIC Win32/64 runtime	
PROCESSORS	•	•	•	Intel® Celeron® G3900E • 2,40 GHz, 2MB L2 cache • 2 cores, 2 threads • Soldered on-board	
	•	•	•	Intel® Core™ i3-6100E • 2,70 GHz • 3MB smart cache • 2 cores, 4 threads • Soldered on-board	+ 0
	•	•	•	Intel® Core™ i5-6440EQ • 2,70 GHz (3.40 GHz Turbo) • 6MB smart cache • 4 cores, 4 threads • Soldered on-board	+ 0
	•	•	•	Intel® Core™ i7-6820EQ • 2,80 GHz (3,50 GHz Turbo) • 8MB smart cache • 4 cores, 8 threads • Soldered on-board	+ 13
RAM MEMORY	•	•	•	4 GB • 1 module SODIMM DDR4-2133	
	•	•	•	8 GB • 2 x 4 GB modules SODIMM DDR4-2133	+ 1
	•	•	•	16 GB • 2 x 8 GB modules SODIMM DDR4-2133	+ 2
	•	•	•	32 GB • 2 x 16 GB modules SODIMM DDR4-2133	+ 3
INTERNAL PSU	•	•	•	Without UPS (uninterruptible power supply)	
	•	•	•	With UPS (uninterruptible power supply) • integrated in power supply section • batteries kit not included **> note 1**	+ 1
FORCED VENTILATION	•	•	•	Without forced ventilation kit, fanless	
	•	•	•	With forced ventilation kit **> note 2**	+ 8
EXPANSION SLOTS	•	•	•	1 slot PCIe x4 + 1 slot PCI half size, on riser card for expansion cards with total power consumption not greater than 10W **> note 2**	
	•	•	•	2 x PCIe x4 half size, on riser card for expansion cards with total power consumption not greater than 10W **> note 2**	+ 0

OPTIONS	D0	D1	D2		POWER [W]
TPM	•	•	•	TPM - Trusted Platform Module	0
CFAST	•	•	•	CFast SATA	1
SSD mSATA	•	•	•	SSD on mSATA connector onboard, SATA	2
HDD/SSD 2,5"	•			1 x HDD/SSD 2,5" SATA III internal installation kit (HDD/SSD not included)	-
	•			2 x HDD/SSD 2,5" SATA III internal installation kit (HDD/SSD not included)	-
		•		1 x HDD/SSD 2,5" SATA III extractable drawer (HDD/SSD not included) • installation in left predisposition	-
			•	2 x HDD/SSD 2,5" SATA III extractable drawers (HDD/SSD not included)	-
	•	•	•	SSD 2,5" SATA	5
	•	•	•	HDD 2,5" SATA	6
COMMUNICATION PORTS	•	•	•	1 x RS232/422/485 (DB15M) • 1 x USB 2.0 **> note 3**	1
	•	•	•	1 x RS232/422/485 (DB15M) isolated • 1 x USB 2.0 **> note 3**	1
	•	•	•	2 x RS232 (DB9M) **> note 3**	2
	•	•	•	2 x USB 2.0 **> note 3**	0
FIELDBUS	•	•	•	1 x NETcore X card with "60pin-H" connector **> note 3**	3
REMOTE VIDEO LINK	•	•	•	1 x additional video output RVL - Remote Video Link • Remotation up to 100m of DVI-D and USB 2.0 signals • without cables **> note 4**	3
	•	•	•	2 x additional video output RVL - Remote Video Link • Remotation up to 100m of DVI-D and USB 2.0 signals • without cables **> note 4**	3
UPS BATTERY KIT	•	•	•	Batteries kit for detached systems mounting (wall mount) • 30cm cable included	15
	•	•	•	Batteries kit for detached mounting (wall mount) • 100cm cable included	15
WARRANTY EXTENSION	•	•	•	Warranty extension to 18 month	
	•	•	•	Warranty extension to 24 months	
	•	•	•	Warranty extension to 36 months	

NOTES

The power consumption of the configuration takes into consideration the maximum absorbed power of every component and does not include the consumption of the devices connected to the USB ports.

1: UPS module is supported by Microsoft Win32/64 operating systems.

2: The forced ventilation kit is needed to ensure:

- Operating temperature 0°C ÷ +50°C with Core i7 processor (0°C ÷ +45°C without forced ventilation)
- expansion cards with total power consumption lower than 20W

3: Communication boards cannot be installed together.

4: RVL option is in addition to the DVI-D video output on the motherboard, allows the installation of max 1 extractable drawer and have to be connected to a MHR100 or MKR100 monitor or an external RVL module.

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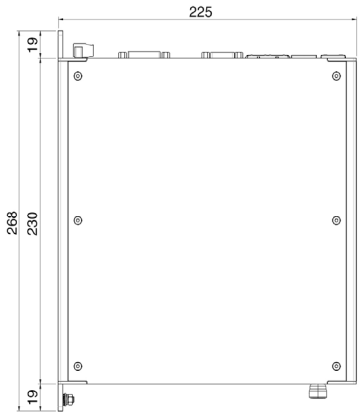
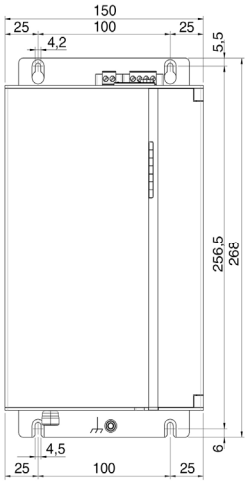
TECHNICAL SPECIFICATIONS		
Case		Wall book mounting
Overall dimensions & weight		See details on the related section
Power supply		24VDC isolated • Input voltage: 18÷32V DC
UPS (optional)		12V DC UPS (Uninterruptible Power Supply) battery backup system
		Batteries module (optional): Pb, 12V/13A max, 2500mA/h • Charge time 3h@25°C • Discharge time 15'@5A and 25°C • Lifetime 10years@25°C
Motherboard		"All-In-One" type • ASEM 1371
Watch dog		Time programmable
Intel platform	Processor	Intel® Celeron® dual core 35W • Intel® Core® 6th generation 35/45W
	Chipset	Intel® HM170 or CM236 PCH (Platform Controller Hub)
Operating System	O.S. certified by ASEM	Microsoft Windows 10 IoT Enterprise 2016 32/64bit • Microsoft Windows 8.1 Industry Pro 32/64bit • Microsoft Windows 7 Pro/Ultimate 32/64bit • Microsoft Windows Embedded Standard 7E/7P 32/64 bit • Linux
		Other operating systems, such as VxWorks, QNX, etc., have not been certified by ASEM but they are reasonably supported by the Intel platform after verification of compatibility
	O.S. not supported by Intel platform	Microsoft Windows XP / 2000 / 98 / Microsoft Windows CE 5 / 6 / 7
Software	Remote assistance	ASEM UBIQUITY BASIC Win32/64 runtime license with ASEM sticker
Video controller		Intel® HD Graphics 510 integrated into Intel® Celeron™ microprocessor • 950MHz
		Intel® HD Graphics 530 integrated into Intel® Core™ microprocessor • 950MHz / 1GHz
Video RAM (shared)		Dynamic Video Memory Technology • Memory quantity is automatically selected by operating system
System memory		DDR4-2133 type • 2 SODIMM modules • min 4GB • max 32GB
Mass storage interfaces		2 x SATA III, 6Gb/s • 1 x mSATA SATA III, 6Gb/s
RAID controller		Integrated into chip Intel® HM170/CM236 PCH • Raid 0, 1
TPM		2x10 (2,54) Pin-strip connector for optional TPM module
Front signalling (LED)		Power ON • UPS • HDD activity • Over temperature / Battery fault • Watchdog / Reset factory default
Front buttons (with open door)		Power ON • System Reset • Watchdog Reset • Factory Default Reset
Expansion slots		1 x PCIe x4 (Gen 3) + 1 x PCI, with Intel HM170 PCH chipset or 2 x PCIe x4 (Gen 3), with Intel CM236 PCH chipset • for half size cards with power consumption max 5W each
On Top I/F		4 x Ethernet 10/100/1000 Mbps (RJ45), 3 x Intel® I210, 1 x Intel I219LM • 2 x USB 3.0 (Type A) • 2 x USB 2.0 (Type A) • 1 x RS232 (DB9M) • 1 x DVI-D Single Link (max resolution: 1920x1080 FullHD)
	optional	1 or 2 x RVL OUT (RJ45), remotation (TX) up to 100 m of video DVI-D and USB 2.0 signals
On Front I/F (with open front door)		1 x slot CFast (bootable) • 1 x system battery slot (CR2032) • 1 x USB 3.0
Fans (forced ventilation)	optional	2 tachometric fans 40x40x20 with speed controlled by CPU Filter accessible • Filter accessible from the bottom by means of a door
Environmental specifications		Operating temperature without fans: 0°C÷+50°C, 0°C÷+45°C with 24x7 HDD or with Core i7 processor, +5°C÷+45°C with standard HDD • Operating temperature with fans: 0°C÷+50°C, 0°C÷+45°C with 24x7 HDD, +5°C÷+45°C with standard HDD • Storage temperature: -10° ÷ +60°C • Humidity: 80% (non-condensing)
Approvals		CE (EN 55022, EN 61000-3-2/3, EN 55024, EN 60950-1) • cULus LISTED (UL61010) pending
Standard warranty		12 months • Warranty management by ASEM headquarters

OVERALL DIMENSIONS (mm)

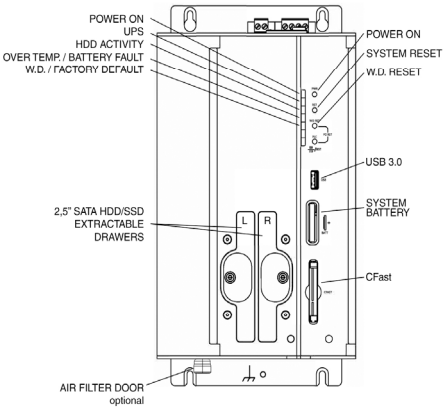
SIDE VIEW



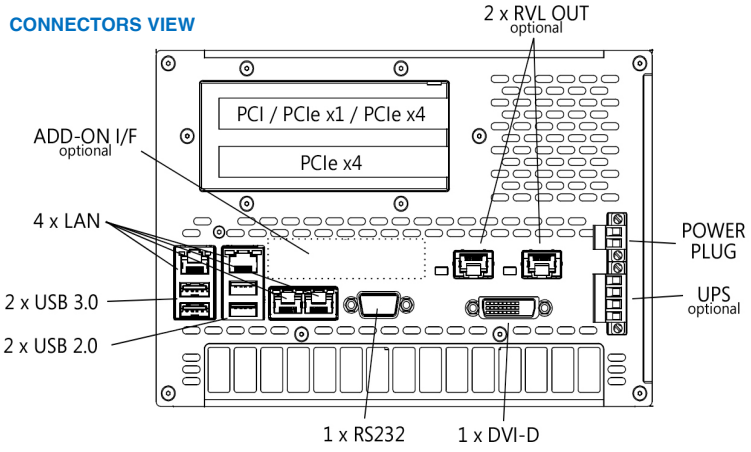
FRONT VIEW



FRONT INTERFACES



CONNECTORS VIEW



BOTTOM VIEW