



NETWORK APPLIANCES

2021 Edition

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uCPE/SD-WAN Appliances

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| NEW INA1600 | Desktop uCPE/SD-WAN Network Appliance with AMD Ryzen™ Embedded V1605B/R1505G & up to 6x GbE Ports | 18 |

Rackmount Network Appliances

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| INA7600 | Performance 2U Network Appliance with Dual Intel® Xeon® Ice Lake Scalable Processor & up to 66 GbE Ports | 19-20 |
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| NEW INA3600 | Enterprise 1U Network Appliance with 10th Gen Intel® Xeon® / Core™ i9/i7/i5/i3 Pentium® Gold / Celeron® Processor & up to 14 GbE Ports | 25 |
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Desktop Network Appliances

| | | |
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| FWA6706D | Compact & Slim Fanless Network Appliance with Intel® Celeron® Processor N3350 & 6 GbE Ports | 33 |
| AGS102 | Ultra-Compact DIN-Rail Network Appliance with Intel® Atom® x7/x5, Pentium® & Celeron® Processor & 2 GbE ports | 34-35 |

Expansion Module Cards

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About IBASE



Core Activities

Design and Manufacturing of Robust Industrial Computing Platforms



Headquarters
Taipei, Taiwan



Founded
February 2000



Chairman
C. S. Lin



Capital
US\$58M



Employee
770
(Worldwide)



Stock Quote
TPEX 8050
(Since 2003)

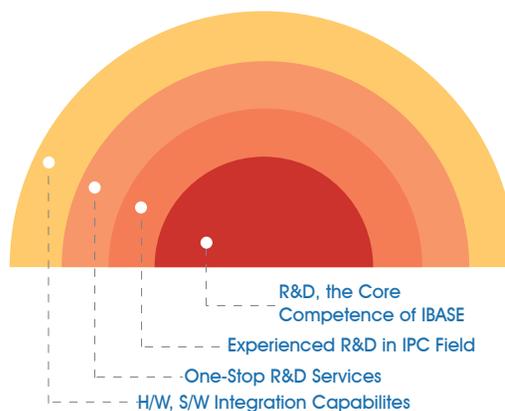
Company Profile

IBASE Technology specializes in the design and manufacture of robust industrial PC products, delivering high quality products and excellent service since its establishment in 2000. IBASE carries out manufacturing and quality control at its own facilities in Taiwan that are certified with ISO 9001, ISO 13485 and ISO 14001 standards. Current offerings comprise x86 and RISC-based industrial motherboards, embedded systems, panel PCs, network appliances and digital signage players. The company is publicly listed in the Taipei Exchange (TPEX: 8050) and is now a leading global provider of innovative industrial and embedded computing solutions.



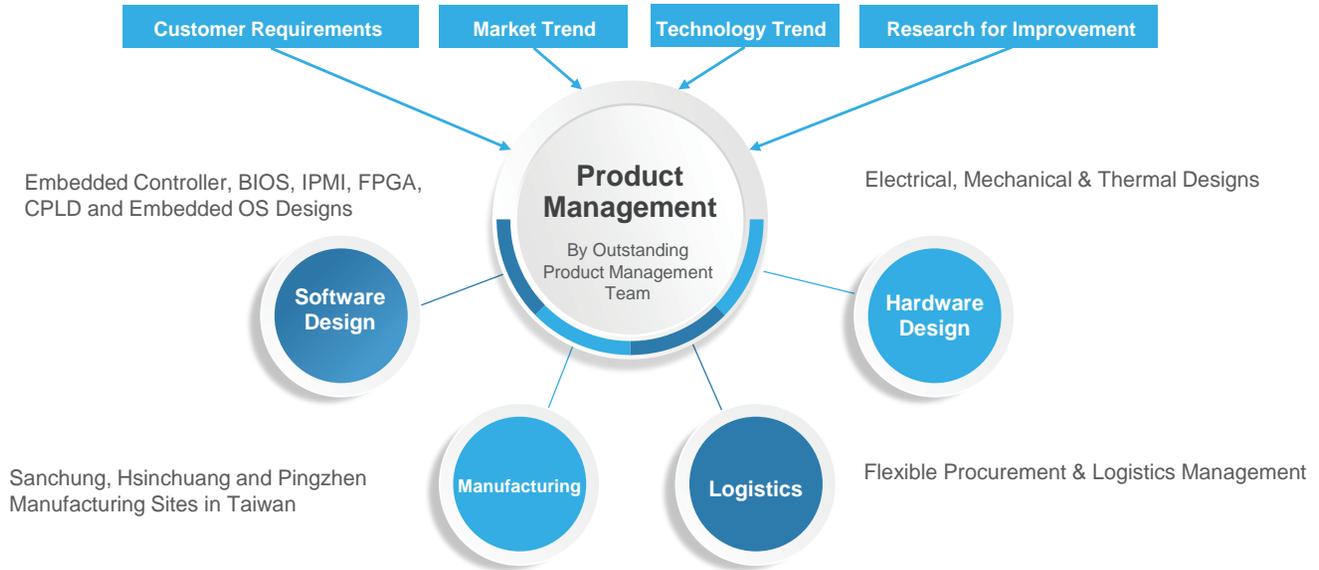
R&D Capabilities

IBASE's R&D team boasts of talented electronics, layout, system, mechanical hardware, BIOS, firmware as well as software engineers. Half of the team members are seasoned with more than 15 years of experience in their respective fields, while 45 percent carry more than five years of experience. Because of their accumulated expertise, the R&D team is able to design and create new products for the demanding and dynamic market.



Design⁺, Manufacture⁺, Service⁺

IBASE offers collaborative design, flexible manufacturing and customized services Supports for our customers. Our network computing appliances are the most important building blocks for network and cybersecurity products, such as NGFW, UTM, WAF, ADC, IPS/IDP, LB/QOS, as well as for the Cloud Computing, SD-WAN and SDN/NFV. Aside from off-the-shelf products, we also provide ODM (Original Design Manufacturer) and JDM (Joint Design Manufacturer) services that include board/system design, software design, manufacturing, validation and after-sales service to fully meet customers' expectation. IBASE attaches great importance to research and development, investing heavily in manpower and resources to continuously provide innovative and high-quality products.



IBASE Manufacturing Sites



3,140 m² / 950 Ping

SANCHUNG

- Board Production
- Validation



6,070 m² / 1,840 Ping

HSINCHUANG

- System Assembly
- Validation



15,700 m² / 4,750 Ping

PINGZHEN

- Board Production
- System Assembly
- Validation

Total Size

268,350 Square-feet
(24,910 m² / 7,540 Ping)

Design & Manufacturing
in Taiwan

Capacity

- SMT Line x 3
- DIP Assembly Line x 2
- System Assembly Line x 10
- Cleanroom x 1
- Burn-in Room x 13
(4 hours per cycle)

PCBA

40K/month (In-house Production) + Outsourcing

System Assembly

10K/month (In-house Production) + Outsourcing

Certifications



ISO 9001



ISO 14001



ISO 13485



ISO/TS 16949



Modular Design with High Expandability

The modular design of IBASE's network appliances ensures high expandability and scalable functionality, as well as a reduction in the total cost of ownership. This standard approach allow rapid customization and easy configuration with modules that can be interchangeably combined to meet customers' optimal requirements.

IBASE network appliances offer flexible customization by enabling the same physical slots to Supports different combinations of network interface controller (NIC) modules, HDD trays or empty slot. Advanced LAN bypass features fault-tolerance that prevents single point of failure in the appliance in mission critical networks to ensure essential business communications continue in the event of power outage.



NIC Modules



- Wide choice of network modules
- Optional 1GbE RJ45/SFP, 10GbE SFP+, 25GbE SFP28, 100GbE QSFP28
- Advanced LAN bypass pairs
- Flexible and hot-swappable slots for NIC modules

Data Processing



- Multi-core processing for optimal performance and throughput with Supports for DPDK, VMDq, SR-IOV
- Advanced security and anti-theft protection via TPM for full disk encryption

System Features



- High density I/O ports
- Programmable user self-defined button
- Supports for SATA, SAS, NVMe, M.2, mSATA or Mini PCI-E card for selected products
- Hot-swappable 2.5"/3.5" storage modules

Power Supply Unit (PSU)



- Redundant and hot-swappable power supply units
- AC or DC power supply options

Mounting Kits



- Rack mounting or wall mounting for desktop appliances
- Slide-rail mounting for 1U / 2U rackmount appliances
- DIN-rail mounting for desktop appliances

Advanced LAN Bypass



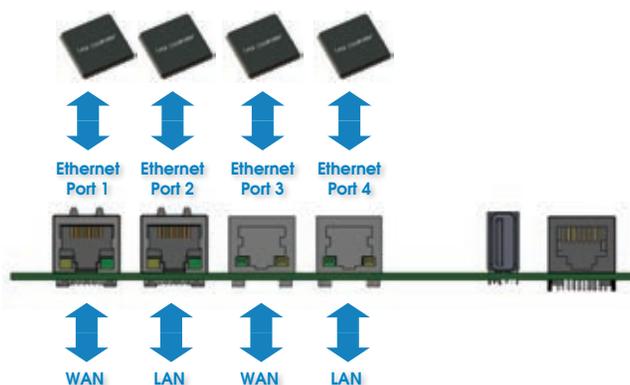
What is LAN Bypass?

Bypass is a hardware device that provides a fail-safe access port for an in-line monitoring appliance such as an IPS, firewall, WAN optimization device or UTM system. If the appliance loses power, experiences a software failure, or is removed, traffic can no longer flow through the link. The bypass switch removes the point of failure by automatically shunting traffic around the appliance whenever the appliance is incapable of passing traffic. The advantage of using bypass is it keeps network traffic flowing when the in-line appliance fails.

IBASE advanced LAN bypass provides two setting methods. The system developer can decide to use the BIOS or hardware jumper to control the bypass behavior in the system. BIOS control provides flexible usage for further upgrade or modification, and hardware jumper can fix the LAN operation at "Bypass" or "Normal" mode to prevent end users from changing the BIOS setting.

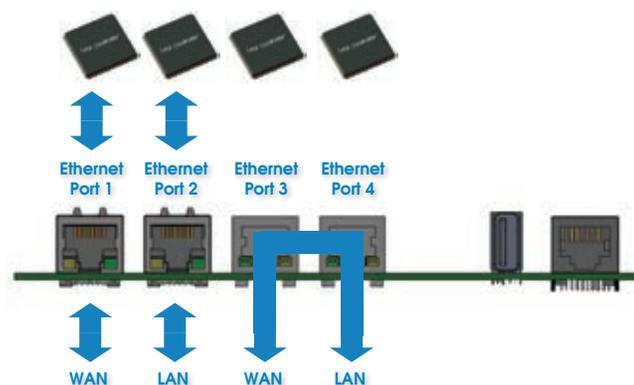
Normal Mode:

Ethernet Port 1 - 4 are in normal mode.



Bypass Mode:

Ethernet Port 3 & 4 are configured, being disconnected from the LAN controller in bypass mode. LAN ports are bridged together in pair.



Features:

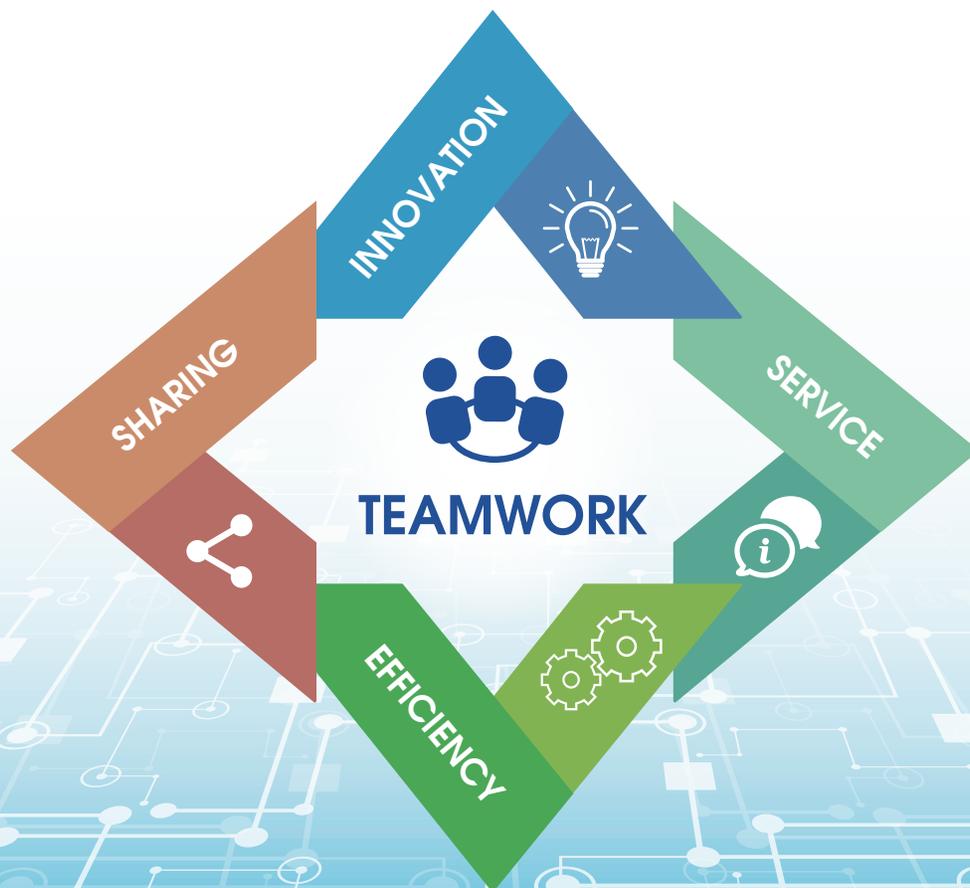
- LAN bypass or normal mode preset by BIOS
- Independent status control for each bypass segment
- Able to bypass GbE ports on a host system in response to three instances:
 1. System off
 2. System power on (the brief moment before accessing OS)
 3. System on (software request during runtime).
- System reboot during runtime if system hangs without packet loss.
- Software programmable bypass or normal mode.

Your Best Partner

Since its establishment in 2000, IBASE has rapidly grown into a leading provider of industrial computers and network appliances. IBASE leverages its extensive manufacturing experience to produce quality products for both OEM/ODM clients and off-the-shelf market, using the latest Intel® and AMD Processor and technologies to provide the right hardware solution.

To meet tomorrow's every-changing network requirements, IBASE has introduced the modular architecture to create flexible and configurable network platforms that drive down the total cost of ownership and result in shorter time-to-market.

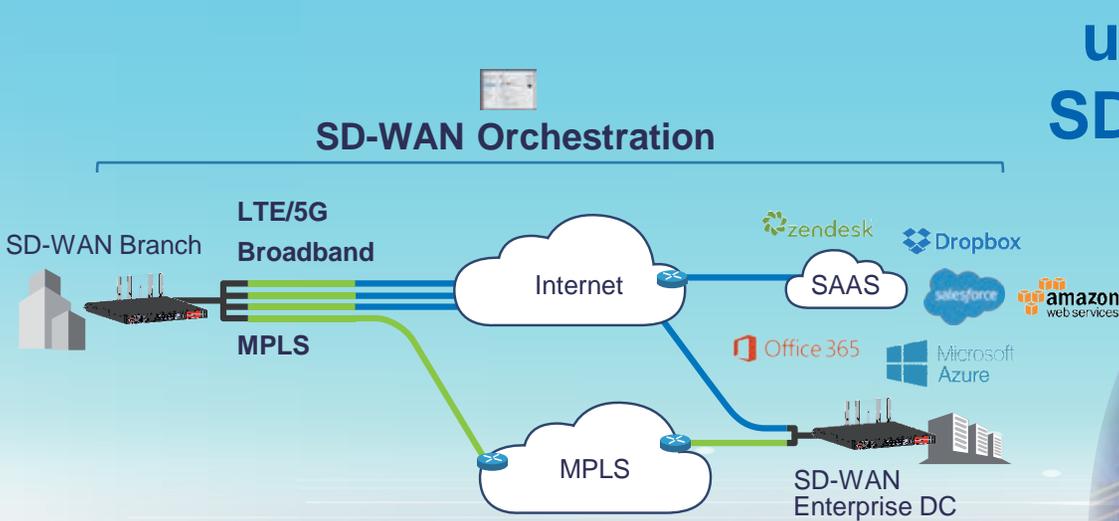
IBASE is a trustworthy partner and has built its reputation through serving clients with well-designed products, cutting-edge solutions and features according to market demands and specific client needs. To this day, IBASE continue to foster an unbreakable relationship, working hand-in-hand with both customers and vendors to form a win-win partnership.



5G Opportunities

With the development of network function virtualization technology, telecom infrastructure from LTE to 5G has undergone drastic changes. Not only the much increased speed, but the innovative edge structure will also dramatically change our life style.

Some of the latency sensitive applications, such as AR, VR, video delivery or factory automation, have moved to the edge. The more rugged conditions in the edge environment have posed some challenges on the hardware design, such as extreme temperature requirements, limited space and limited power. Our newly designed INA5606 with Intel's latest Xeon® D processor will satisfy those requirements even with only 450mm in depth.



uCPE SDWAN

Application Delivery

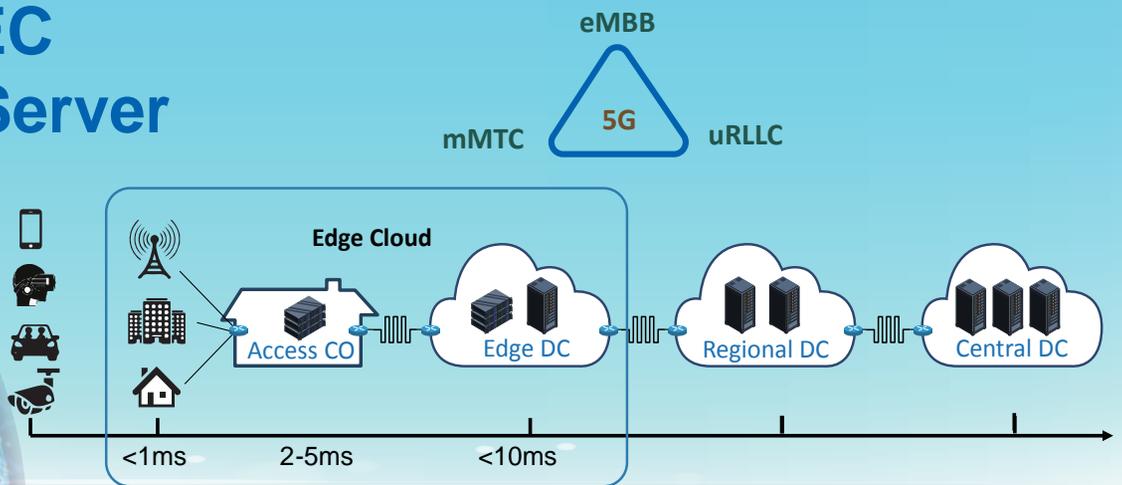
Application Delivery Controller



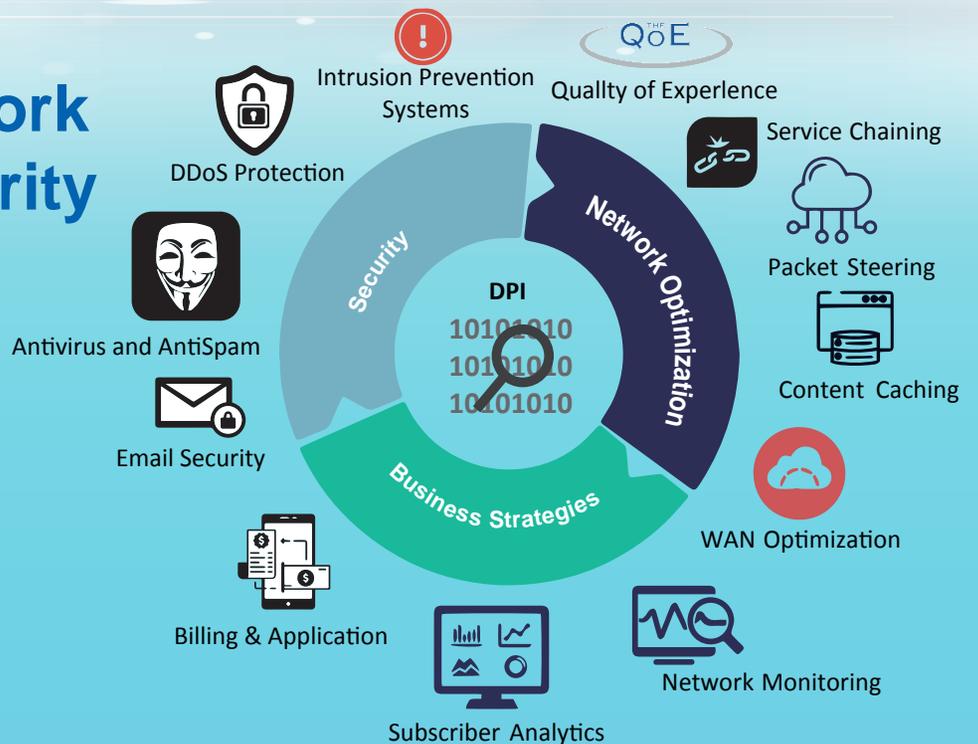
On the customer's premises, traditional network appliances such as router, firewall, IPS, DDoS have been virtualized as VNFs, ready to be installed as applications in uCPE (Universal Customer Premise Equipment) with SD-WAN as the first commercialized application.

At IBASE, we've been providing network appliances for network security and application optimization for more than a decade, such as our desktop and rackmount product lines. Traditional network appliances in networking, we are extending our product lines by adding uCPE/SD-WAN products, with INA1600 and INA5606 as the first products supporting WiFi 6 and LTE up to Cat20/5G. On top of that, with IBASE's expertise in several IoT vertical markets, we'll also provide MEC (Multi-Access Edge Computing) servers to integrate IoT network requirements with 5G edge infrastructure.

MEC Edge Server



Network Security



Network Security Applications

By making life easier and supporting faster progress, networking and communication have proved to be crucial elements in the daily lives of people by allowing them to be in constant touch with one another and making the world a small place to live in. IBASE has positioned itself with network hardware solutions such as enterprise level 2U/1U rackmount network computing appliances, desktop network security appliances, networking motherboards and expansion module cards.

We offer high-speed network appliance solutions for different market segments and applications, including enterprise network security, IoT security, advanced threat protection, unified threat management (UTM), firewall, VPN, content filtering, SDN/NFV/SD-WAN, vCPE/uCPE, remote access server, and data management and analytics. Our solutions feature four to 66 high-speed Gigabit Ethernet ports and expansion module cards to provide multi-function & more flexible networking configurations.

Cloud Computing



- Infrastructure as a service (IaaS)
- Software as a service (SaaS)

Network Management



- Central Portal Management
- Network Monitoring & Analytics



SDN & NFV



- SD-WAN
- uCPE

Network Security



- Firewall
- UTM

Cyber Security



- Intrusion Detection Systems
- Encryption/Decryption



Network Appliances Introduction

IBASE's extensive range of network appliances comprise desktop, 1U and 2U rackmount systems that Supports a broad array of powerful Intel® and AMD processors, various combinations of Ethernet modules, inner storage expansion alternatives and redundant power supplies to ensure high availability and serviceability.

Built around the x86 architecture, these high performance networking platforms provide the hardware capabilities for a wide range of network and cyber security applications in various markets including independent software vendors (ISV), small and medium business (SMB), SOHO and enterprise markets, among others.

Enterprise

Enterprise
&
SMB/SME

SOHO



INA1600



FWA6706D



INA5606



AGS102



FWA8800



INA7600



FWA8708



FWA9500



FWA8600



FWA8506



FWA6706R



INA3600

uCPE/
SD-WAN

Desktop

1U Rackmount

2U Rackmount

Comparison Table



| Model | | INA5606 | INA1600 | INA3600 |
|-----------------------|------------|---|--|---|
| Form Factor | | 1U Mid-Range uCPE | Desktop | 1U Rackmount |
| CPU | | Intel® Xeon® D Processor | AMD Ryzen™ Embedded V1605B/R1505G | Intel® Xeon® Comet Lake-W |
| Chipset | | N/A | N/A | Intel® W480E PCH chipset |
| System Memory | | 4x DDR4 DIMMs, Max. 256GB RDIMM or 512GB LRDIMM up to 3200MHz | 2x DDR4 SO-DIMMs up to 3200MHz, Max. 32GB (ECC/non-ECC) | 2x DDR4 DIMMs up to 2400MHz, 1x DIMMs, Max. 64GB (Non-ECC) |
| Ethernet | On-board | 4x GbE RJ45 ports (Intel® i350 AM4) 4x GbE RJ45 ports (Intel® i211) with 2 pair bypass 4x 25 GbE SFP28 ports (Intel® C827) | INA1600V: 4x Intel® I211-AT GbE 1x Intel® i350-AM2 (2x GbE RJ45 or SFP combo ports) INA1600R: 4x Intel® I211-AT GbE | 6x Intel® I210-AT GbE |
| | Bypass | 2x segment | 1x segment | 2x Segment |
| | NIC Module | 1x IBN series (Optional, by SKU) | N/A | 1x PCI-E x8 golden finger for NIC module |
| Expansion | | 1x PCI-E x16 Expansion slot (Optional, by SKU) 1x M.2(B-Key) Supports USB 3.0 & PCI-E signal 1x mini PCI-E Supports PCI-E & USB 2.0 | 1x Mini PCI-E slot 1x M.2 slot (B-key 3042, PCI-E(x1) & USB 3.0 signal) 2x Micro SIM for M.2 or Mini PCI-E 4G/LTE module 1x M.2 slot (B/M-key 3080, PCI-E(x2) & USB 3.0 & SATA) | 1x PCI-E x8 slot |
| Storage | | 1x M.2(B-Key) Supports SATA & PCI-E 2x 2.5" Swappable SATA drive bay | 1x 2.5" SATA drive bay 1x 16GB/32GB/64GB eMMC | 3x SATA Data connectors 3x SATA Power connectors 3x 2.5" internally |
| Display | | 1x VGA (via optional IDN100 IPMI Module) | 1x DisplayPort | 1x VGA pin-header (via DP to VGA Bridge; CH7517A-BF) 1x LCM |
| TPM | | TPM2.0 (Optional TPM2.0 module) | TPM 2.0 | TPM2.0 |
| I/O | Console | 1x RJ45 | 1x RJ45 | 1x RJ45 |
| | Reset | NA | 1x Factory default (GPIO) | 1x Factory default (GPIO) |
| | USB | 2x USB 3.0 | 2x USB 3.0 | 2x USB 3.1 |
| | LED | Power / HDD / Status | Power / HDD / Status | Power / HDD / Status |
| Power Supply | | Full range 800W CRPS 1+1 redundant power supply | Full range 84W adaptor / 12V | Full range 250 Watt Single AC Power Supply |
| Dimensions (mm) | | 443.7(W) x 450(D) x 43.8(H) | 250 (W) x 231 (D) x 44 (H) | 438(W) x 330(D) x 44(H) ± 0.3mm |
| Weight | | 15.0 kg (33 lbs) | 5.3 kg (11.68 lbs) | 12.0 kg (26.4 lbs) |
| Operating Temperature | | 0°C ~ 40°C (32°F ~ 104°F) | 0°C ~ 40°C (32°F ~ 104°F) | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | | -20° ~ 70°C (-4°F ~ 158°F) | -20°C ~ 70°C (-4°F ~ 158°F) | -20° ~ 70°C (-4°F ~ 158°F) |
| Relative Humidity | | 5 ~ 90% | 5 ~ 90% | 5 ~ 90% |
| Certification | | CE/FCC | CE/FCC | CE/FCC |
| Page No. | | p. 17 | p. 18 | p. 25 |

Comparison Table



| Model | | INA7600 | FWA9500 | FWA8800 |
|-----------------------|------------|---|--|--|
| Form Factor | | 2U Rackmount | 2U Rackmount | 1U Rackmount |
| CPU | | Dual Intel® Xeon® Ice Lake scalable processors, LGA4189 | Dual Intel® Xeon® Skylake scalable processors, LGA3647 | AMD EPYC™ Embedded 3000 series processor |
| Chipset | | Intel® C621A PCH Chipset | Intel® C624 PCH Chipset | N/A |
| System Memory | | 1.6x DDR4 RDIMMs Up to 3200MHz, Max. 512GB RDIMM | 1.6x DDR4 DIMMs Up to 2666MHz, Max. 512GB RDIMM | 4x DDR4 DIMMs Up to 2666MHz; Max. 64GB UDIMM (ECC/non-ECC) or 128GB RDIMM |
| Ethernet | On-board | 2x Intel® I210-AT GbE | 2x Intel® I210-AT GbE | 1x Intel® I210-AT GbE |
| | Bypass | Depending on IBN module SKU | Depending on IBN module SKU | Depending on IBN module SKU |
| | NIC Module | 8x IBN series, Max. 64GbE port | 8x IBN series, Max. 64GbE ports | 2x IBN series, Max. 16GbE ports |
| Expansion | | 1x PCI-E x16 slot (8-lane) 1x M.2 (M-key) Supports SATA3.0 or PCI-E | 1x PCI-E x8 slot 1x Mini PCI-E (PCI-E, USB, SATA signal) | 1x PCI-E x8 slot |
| Storage | | 2x 2.5" or 4x 3.5" swappable SATA drive bay (by SKU) 2x U.2 (PCI-E, SATA signal) | 2x 3.5" or 4x 2.5" swappable SATA drive bay (optional) 1x M.2 slot (M-Key 2280, PCI-E x2 signal) 1x CF slot | 2x 2.5" or 3.5" SATA drive bay (optional) 1x M.2 slot (M-Key 2280, PCI-E x4 & SATA signal) |
| Display | | 1x VGA (optional IPMI module) 1x LCM (by SKU#) | 1x VGA (via optional IDN100 module) 1x LCM | 1x VGA (via optional IDN100 module) 1x LCM |
| TPM | | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| I/O | Console | 1x RJ45 | 1x RJ45 | 1x RJ45 |
| | Reset | 1x Factory default (GPIO) | 1x Factory default (GPIO) | 1x Factory default (GPIO) |
| | USB | 2x USB 2.0 | 2x USB 2.0 | 2x USB 2.0 |
| | LED | Power / HDD / Status | Power / HDD / Status | Power / HDD / Status |
| Power Supply | | Full range 1200W 1+1 redundant power supply | Full range 800W 1+1 redundant power supply | Full range 250W ATX or 300W 1+1 redundant power supply |
| Dimensions (mm) | | 438 (W) x 660 (D) x 88 (H) | 438 (W) x 598 (D) x 88 (H) | 438 (W) x 500 (D) x 44 (H) |
| Weight | | 21.0 kg (46.3 lbs) | 20.0 kg (44.1 lbs) | 12.0 kg (26.4 lbs) |
| Operating Temperature | | 0°C ~ 40°C (32°F ~ 104°F) | 0°C ~ 40°C (32°F ~ 104°F) | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | | -20° ~ 70°C (-4°F ~ 158°F) | -20° ~ 70°C (-4°F ~ 158°F) | -20° ~ 70°C (-4°F ~ 158°F) |
| Relative Humidity | | 5 ~ 90% | 5 ~ 90% | 5 ~ 90% |
| Certification | | CE/FCC | CE/FCC | CE/FCC |
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Comparison Table



| Model | | FWA8708 | FWA8600 | FWA8506 |
|-----------------------|------------|--|--|---|
| Form Factor | | 1U Rackmount | 1U Rackmount | 1U Rackmount |
| CPU | | 9th or 8th Generation Intel® Xeon®/ Core™ i7/ i5/i3 processors, LGA1151 | Intel® Xeon® D-2100 Series | Intel® Atom® C3758 Processor up to 2.2GHz |
| Chipset | | Intel® C246 or H310 PCH Chipset | N/A | N/A |
| System Memory | | FWA8708-C: 4x DDR4 DIMMs, up to 2666MHz, Max. 64GB UDIMM (ECC/non-ECC) FWA8708-H: 2x DDR4 DIMMs, up to 2666MHz, Max. 32GB UDIMM (Non-ECC) | 4x DDR4 DIMMs up to 2666MHz, Max. 128GB RDIMM | 2x DDR4 DIMMs up to 2400MHz, Max. 64GB RDIMM, Max. 32GB UDIMM (ECC/non-ECC) |
| Ethernet | On-board | FWA8708-C: 6x Intel® I210AT + 2x Intel® I210S GbE FWA8708-H: 6x Intel® I211AT GbE | 1x Intel® I210-AT GbE | 6x Intel® I211-AT GbE 1x Inphi CS4223 for 4x10GbE SFP+ |
| | Bypass | 2x segment | Depending on IBN module SKU | 2x segment |
| | NIC Module | 1x IBN series (for FWA8708-C only) | 3x IBN series & 1x IBN-P401Q, Max. 24 GbE ports | N/A |
| Expansion | | FWA8708-C: 1x or 2x PCI-E slot on rear panel 1x Mini PCI-E slot (PCI-E, SATA signal) FWA8708-H: 1x Mini PCI-E slot (SATA signal) | 1x PCI-E x8 slot (4-lane) | 1x PCI-E x8 slot (4-lane) |
| Storage | | 2x 2.5" or 3.5" SATA drive bay (optional) 1x M.2 slot (M-key 2280, PCI-E x4 & SATA signal, FWA8708-C only) | 1x or 2x 2.5" SATA drive bay 1x M.2 slot (M-Key 2280, PCI-E x4 & SATA signal) | 2x 2.5" SATA drive bays 1x CF slot |
| Display | | 1x VGA via pin-header 1x LCM | 1x VGA (via optional IDN100 module) 1x LCM | 1x LCM |
| TPM | | TPM 2.0 | TPM 2.0 | TPM 1.2 |
| I/O | Console | 1x RJ45 | 1x RJ45 | 1x RJ45 |
| | Reset | 1x Factory default (GPIO) | 1x Factory default (GPIO) | 1x Factory default (GPIO) |
| | USB | 2x USB 3.0 | 2x USB 2.0 | 2x USB 3.0 |
| | LED | Power / HDD / Status | Power / HDD / Status | Power / HDD / Status |
| Power Supply | | Full range 250W ATX or 300W 1+1 redundant power supply | Full range 250W ATX or 300W 1+1 redundant power supply | Full range 250W ATX power supply |
| Dimensions (mm) | | 438 (W) x 422 (D) x 44 (H) | 438 (W) x 451 (D) x 44 (H) | 438 (W) x 340 (D) x 44 (H) |
| Weight | | 9.0 kg (19.84 lbs) | 10.0 kg (22.05 lbs) | 6.50 kg (14.33 lbs) |
| Operating Temperature | | 0°C ~ 40°C (32°F ~ 104°F) | 0°C ~ 40°C (32°F ~ 104°F) | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | | -20° ~ 70°C (-4°F ~ 158°F) | -20° ~ 70°C (-4°F ~ 158°F) | -20° ~ 70°C (-4°F ~ 158°F) |
| Relative Humidity | | 5 ~ 90% | 5 ~ 90% | 5 ~ 90% |
| Certification | | CE/FCC | CE/FCC | CE/FCC |
| Page No. | | p. 26 - 27 | p. 28 - 29 | p. 30 - 31 |

Comparison Table



| Model | | FWA6706R | FWA6706D | AGS102 |
|-----------------------|------------|---|---|--|
| Form Factor | | 1U Rackmount | Desktop | Desktop |
| CPU | | Intel® Atom® N3350 Dual-Core SoC 1.1GHz | Intel® Atom® N3350 Dual-Core SoC 1.1GHz | Intel® Atom® x7-E3950/x5-E3930 & Pentium® N4200 / Celeron® N3350 Series processors |
| Chipset | | N/A | N/A | N/A |
| System Memory | | 2x DDR3L SO-DIMMs up to 1866MHz, Max. 16GB (Non-ECC) | 2x DDR3L SO-DIMMs up to 1866MHz, Max. 16GB (Non-ECC) | 1x 4GB DDR3L-1866 SO-DIMM, Max. 8GB |
| Ethernet | On-board | 6x Intel® I211-AT GbE | 6x Intel® I211-AT GbE | 2x Intel® I210-IT GbE |
| | Bypass | 1x segment | 1x segment | N/A |
| | NIC Module | N/A | N/A | N/A |
| Expansion | | 1x Mini PCI-E (PCI-E & USB signal) | 1x Mini PCI-E (PCI-E & USB signal) | 1x Mini PCI-E (PCI-E, SATA & USB signal) 1x M.2 slot (E-Key 2230, PCI-E & USB signal) 1x M.2 slot (B-Key 3042, SATA & USB signal) |
| Storage | | 1x 2.5" SATA drive bay 1x CF slot | 1x 2.5" SATA drive bay 1x CF slot | 1x mSATA slot 1x M.2 slot (B-Key 2242, SATA signal) |
| Display | | 1x VGA via pin-header 1x LCM | 1x VGA via pin-header | 1x DVI-I 1x DisplayPort |
| TPM | | TPM 1.2 | TPM 1.2 | N/A |
| I/O | Console | 1x RJ45 | 1x RJ45 | 4x DB-9 |
| | Reset | 1x Factory default (GPIO) | 1x Factory default (GPIO) | N/A |
| | USB | 2x USB 3.0 | 2x USB 3.0 | 4x USB 3.0 1x USB 2.0 |
| | LED | Power / HDD / Status | Power / HDD / Status | Power / HDD / WLAN / WWAN |
| Power Supply | | Full range 65W power supply (Open Frame) | Full range 40W adaptor / 12V | Full range 60W adaptor / 12V |
| Dimensions (mm) | | 438 (W) x 180 (D) x 44 (H) | 227 (W) x 142 (D) x 44 (H) | 160 (W) x 110 (D) x 44 (H) |
| Weight | | 3.0 kg (6.62 lbs) | 2.0 kg (4.41 lbs) | 1.0 kg (2.21 lbs) |
| Operating Temperature | | 0°C ~ 45°C (32°F ~ 113°F) | 0°C ~ 40°C (32°F ~ 104°F) | 0°C ~ 45°C (-40°F ~ 158°F) (12W Max. CPU) -20°C ~ 60°C (-4°F ~ 140°F) (6W CPU) |
| Storage Temperature | | -20° ~ 70°C (-4°F ~ 158°F) | -20° ~ 70°C (-4°F ~ 158°F) | -40° ~ 85°C (-40°F~185°F) |
| Relative Humidity | | 5 ~ 90% | 5 ~ 90% | 5 ~ 90% |
| Certification | | CE/FCC | CE/FCC | CE/FCC/CCC |
| Page No. | | p. 32 | p. 33 | p. 34 - 35 |

INA5606

uCPE/SD-WAN Appliances

Enterprise 1U Mid-Range uCPE/SD-WAN Network Appliance with Intel® Xeon® D Processor & up to 8x GbE & 4x 25 GbE Ports



Features

- Intel® Xeon® D Processor
- 4x DDR4 DIMMs, Max. 256GB RDIMM or Max. 512GB LRDIMM
- 8x GbE RJ45 with 2 pair bypass & 4x 25GbE SFP28 on board
- 1x M.2 for LTE/5G with dual SIM slot
- 1x mini PCI-E for Wifi/ Wifi 6
- 2x 2.5" SATA/NVMe Swappable HDD/SSD
- Optional 1x PCI-E x16 Expansion Slot (by SKU)
- Optional 1x IBN-NIC Slot (by SKU)
- Optional IPMI 2.0 Module

Specifications

| | |
|-----------------------|---|
| CPU | Intel® Xeon® D Processor |
| Chipset | NA |
| Memory | 4x DDR4 DIMMs, Max. 256GB RDIMM or 512GB LRDIMM up to 3200MHz |
| Display | 1x VGA (via optional IDN100 IPMI Module) |
| Ethernet | 4x Gbe RJ45 ports (Intel® i350 AM4) 4x Gbe RJ45 ports (Intel® i211) with 2 pair bypass 4x 25 Gbe SFP28 ports (Intel® C827) |
| Bypass | 2x Segment (LAN5/6 & LAN 7/8) |
| Expansion | 1x PCI-E x16 Expansion slot (Optional by SKU) 1x PCI-E x8 Expansion slot(Optional by SKU) 1x M.2(B-Key) supports USB 3.0 & PCI-E signal 1x mini PCI-E supports PCI-E & USB 2.0 |
| IPMI | Optional module; compliant with IPMI 2.0 |
| Storage | 1x M.2(B-Key); Supports SATA & PCI-E 2x 2.5" Swappable SATA drive bay |
| TPM | TPM2.0 (Optional TPM2.0 module) |
| I/O | 3x LED (Power/ HDD/ Status) 1x RJ45 Console Port 1x RJ45 Management Port 2x USB 3.0 Port |
| Power Supply | Full range 800W CRPS 1+1 Redundant Power Supply |
| Dimensions | 443.7(W) x 450(D) x 43.8(H) mm 17.46" (W) x 17.71" (D) x 1.72" (H) |
| Weight | 15 Kg (estimated) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20° ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5 ~ 90% |
| Certification | CE/FCC |

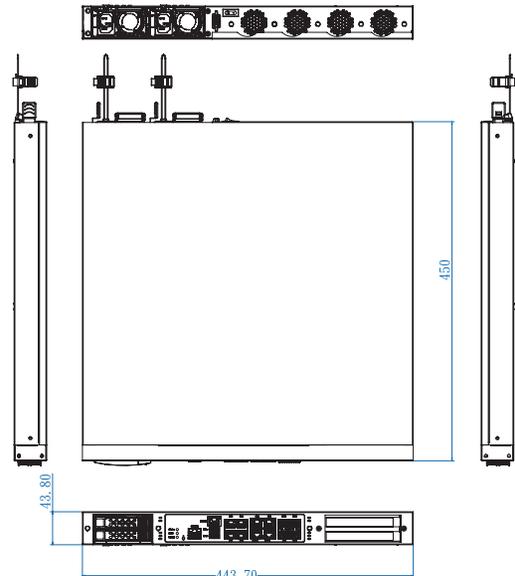
Ordering Information

| | |
|-------------|---|
| INA5606-EXP | INA5606-EXP 1U mid-range uCPE Appliance, MBN606 Intel® Xeon® D Processor, 4x DDR4 DIMMs, Max. 8x GbE Ports and 4x 25 GbE SFP28 Ports, 800W CRPS 1+1 Redundant PSU, CPU Cooler, Optional IPMI, 1x PCI-E x16 slot, 2x 2.5" SDD Tray, Barebone without RAM/HDD/SSD |
| INA5606-NIC | INA5606-NIC 1U mid-range uCPE Appliance, MBN606 Intel® Xeon® D Processor, 4x DDR4 DIMMs, Max. 8x GbE Ports and 4x 25 GbE SFP28 Ports, 800W CRPS 1+1 Redundant PSU, CPU Cooler, Optional IPMI, 1x IBN-NIC slot, 2x 2.5" SDD Tray, Barebone without RAM/HDD/SSD |

Accessories

| | |
|--------|---|
| PK1-51 | Console cable, 160cm |
| VGA21A | VGA cable, 40cm |
| IDN100 | IPMI 2.0 module with Ibase proprietary DDR4 SO-DIMM golden finger |

Dimensions



INA1600

uCPE/SD-WAN Appliances

Desktop uCPE/SD-WAN Network Appliance with AMD Ryzen™
Embedded V1605B/R1505G & up to 6x GbE Ports



Features

- AMD Ryzen™ Embedded V1605B/R1505G
- 2x DDR4 SO-DIMMs; Max. 32GB (ECC/non-ECC)
- 4x GbE RJ45
- 2x GbE RJ45 or SFP combo ports (for INA1600V only)
- 1x Mini PCI-E slot
- 2x M.2 slot
- Supports WiFi/WiFi 6, LTE/5G, with up to 8 antennas

Specifications

| | |
|-----------------------|---|
| CPU | INA1600V: AMD Ryzen™ Embedded V1605B INA1600R: AMD Ryzen™ Embedded R1505G |
| Chipset | N/A |
| Memory | 2x DDR4 SO-DIMMs Up to 3200MHz, Max. 32GB (ECC/non-ECC) |
| Display | 1x DisplayPort |
| Ethernet | INA1600V: 4x Intel® I211-AT GbE 1x Intel® i350-AM2 (2x GbE RJ45 or SFP combo ports) INA1600R: 4x Intel® I211-AT GbE |
| Bypass | 1x segment, LAN 1/2 |
| Expansion | 1x Mini PCI-E slot 1x M.2 slot (B-key 3042, PCI-E(x1) & USB 3.0 signal) 2x Micro SIM for M.2 or Mini PCI-E 4G/LTE module 1x M.2 slot (B/Mkey 3080, PCI-E(x2) & USB 3.0 & SATA) |
| IPMI | N/A |
| Storage | 1x 2.5" SATA drive bay 1x 16GB/32GB/64GB eMMC |
| TPM | TPM 2.0 |
| I/O | 3x LED (Status/HDD/Power) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 3.0 1x DisplayPort |
| Power Supply | Full range 84W adaptor / 12V |
| Dimensions | 250(W) x 231(D) x 44(H) mm 9.84" (W) x 9.09" (D) x 1.73" (H) |
| Weight | 5.3 kg (11.68 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20°C ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5% ~ 90% |
| Certification | CE/FCC |

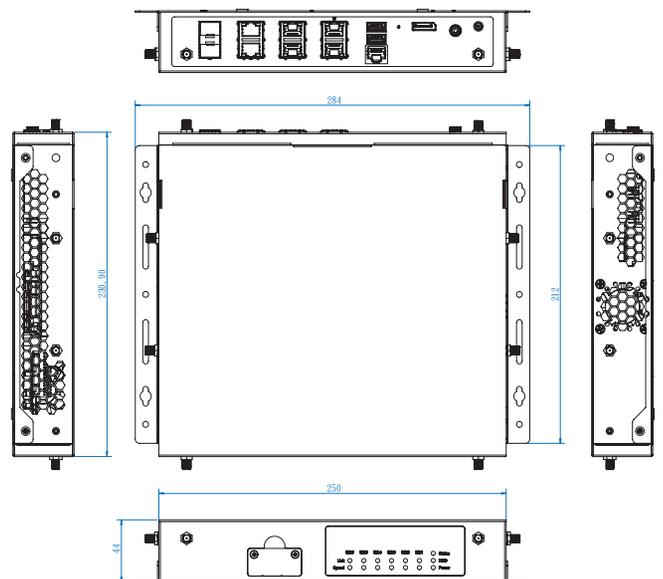
Ordering Information

| | |
|----------|--|
| INA1600V | Desktop Appliance, AMD Ryzen™ Embedded V1605B, 2x DDR4 SO-DIMMs, 4x GbE RJ45 w/ 1 Pair of Bypass, 2x GbE RJ45 or SFP combo ports, 84W Adaptor, DisplayPort, Barebone without RAM/HDD/Drive Bay Kit |
| INA1600R | Desktop Appliance, AMD Ryzen™ Embedded R1505G, 2x DDR4 SO-DIMMs, 4x GbE RJ45 w/ 1 pair of Bypass, 84W Adaptor, DisplayPort, Barebone without RAM/HDD/Drive Bay Kit |

Accessories

| | |
|--------------|----------------------|
| PK1-51 | Console cable, 160cm |
| 2.5" HDD Kit | 2.5" HDD bracket |

Dimensions



INA7600

Rackmount Network Appliance

Performance 2U Network Appliance with
Dual 3rd Gen Intel® Xeon® Scalable Processors & up to 66 GbE Ports



Features

- Dual 3rd Gen Intel® Xeon® Scalable Processors (ICL-SP)
- 16x DDR4 RDIMM, Max. 512GB
- 8x or 4x NIC Modules, Max. 64 GbE Ports
- 1x PCI-E x16 Expansion Slot
- Optional IPMI 2.0 Module
- 1200-Watt Redundant Power Supply

Specifications

| | |
|-----------------------|--|
| CPU | Dual LGA4189 Socket for Intel® Xeon® ICL-SP |
| Chipset | Intel® C621A PCH Chipset |
| Memory | 16x DDR4 RDIMMs up to 3200MHz Max. 512GB |
| Display | 1x VGA (base on optional IPMI module) |
| Ethernet | 2x Intel® I210-AT GbE on IDN901 daughter board 8x or 4x NIC module, Max. 64 GbE ports |
| Bypass | Via IBN module SKU |
| Expansion | 1x PCI-E x16 slot (8-lane) 1x M.2 (M-key) Supports SATA3.0 or PCI-E |
| IPMI | Optional module; compliant with IPMI 2.0 |
| Storage | 2x 2.5" or 4x 3.5" Swappable SATA drive bay (by SKU) 2x U.2 (PCI-E x4, SATA signal) |
| TPM | TPM2.0 |
| I/O | 1x LCM (by SKU) 3x LED (Power/ HDD/ Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 2.0 2x MGMT Ports (LAN2 share with IPMI NC-SI port) |
| Power Supply | Full range 1200W 1+1 redundant power supply |
| Dimensions | 438 (W) x 660 (D) x 88 (H) mm 17.24" (W) x 25.98" (D) x 3.46" (H) |
| Weight | 21.0 kg (46.3 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20° ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5 ~ 90% |
| Certification | CE/FCC |

Ordering Information

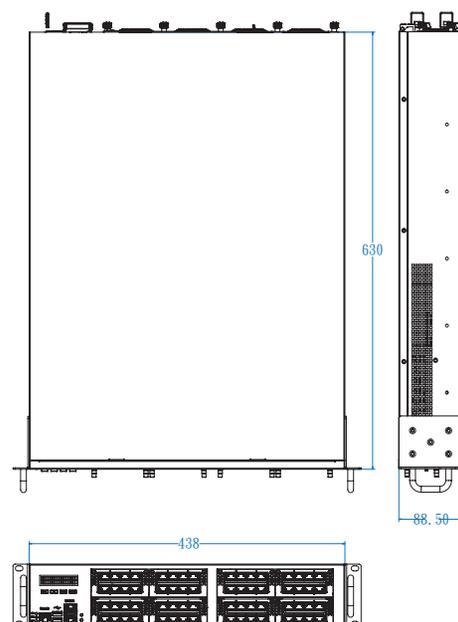
| | |
|-------------|---|
| INA7600-NIC | INA7600-NIC 2U Rackmount Appliance, MBN901 Dual 3rd Gen Intel® Xeon® ICL-SP, C621A PCH, 16x DDR4 DIMMs, Max. 66 GbE Ports, 1200W RPSU, CPU Cooler, optional IPMI, 1x PCI-E x16 slot, 2x U.2 slots. 1x iIO2 LCM. Barebone without CPU/RAM/HDD/IBN Card* (Must order 8x IBN-cards) |
| INA7600-SHQ | INA7600-SHQ 2U Rackmount Appliance, MBN901 Dual 3rd Gen Intel® Xeon® ICL-SP, C621A PCH, 16x DDR4 DIMMs, Max. 34 GbE Ports, 1200W RPSU, CPU Cooler, optional IPMI, 1x PCI-E x16 slot, 2x U.2 slots. 4x 3.5" HDD Tray. Barebone without CPU/RAM/HDD/IBN Card* (Must order 4x IBN-cards) |

* For a complete system, IBN modules & some components must be ordered.

Accessories

| | |
|--------|----------------------|
| PK1-51 | Console cable, 160cm |
| IDN100 | IPMI 2.0 module |
| VGA21A | VGA cable, 40cm |

Dimensions

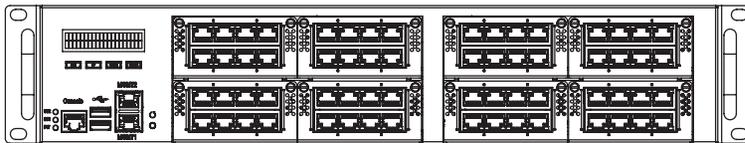


Optional Component BOM

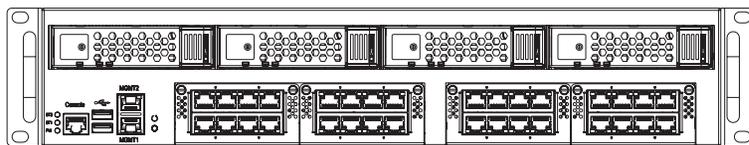
| Component BOM | Configuration Options | |
|---------------|--|--|
| Model Kit | Front IOs | Remarks |
| INA7600 KIT1 | INA7600-NIC: 8 NIC slots with internal max. 2x 2.5" drive bay | For a complete system, component BOM, IBN module tray must be ordered. |
| INA7600 KIT2 | INA7600-SHQ: 4 NIC slots with swappable 4x 3.5" driver bay | |

Front I/O

INA7600-NIC



INA7600-SHQ



FWA9500

Rackmount Network Appliance

Performance 2U Network Appliance with Dual Intel® Xeon® Skylake Scalable Processor & up to 66 GbE Ports



Specifications

| | |
|-----------------------|---|
| CPU | Dual LGA3647 sockets for Intel® Xeon® SKL-SP |
| Chipset | Intel® C624 PCH chipset |
| Memory | 16x DDR4 DIMMs up to 2666MHz, Max. 512GB RDIMM |
| Display | 1x VGA (via optional IDN100 module) |
| Ethernet | Onboard: 2x Intel® I210-AT GbE NIC module slots: Max. 8x IBN cards, Max. 66 GbE |
| Bypass | Via IBN module SKU |
| Expansion | 1x PCI-E x8 slot 1x Mini PCI-E (PCI-E, SATA & USB Signal) |
| IPMI | Optional module, compliant with IPMI 2.0 |
| Storage | Max. 2x 3.5" or 4x 2.5" swappable drive bay 1x M.2 slot (M-key 2280, PCI-E x2 signal) 1x CF socket |
| TPM | TPM 2.0 |
| I/O | 1x LCM 3x LED (Power / HDD / Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 2.0 2x MGMT ports (LAN2 share with IPMI NC-SI port) |
| Power Supply | Full range 800W 1+1 redundant power supply |
| Dimensions | 438 (W) x 600 (D) x 88 (H) mm 17.24" (W) x 23.62" (D) x 3.46" (H) |
| Weight | 20 kg (44.1 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20° ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5% ~ 90% |
| Certification | CE/FCC |

Features

- Dual Intel® Xeon® Scalable Processor (SKL-SP)
- 16x DDR4 RDIMM, Max. 512GB
- Max. 8x NIC modules; Max. 64 GbE ports
- Optional IPMI 2.0 module
- 1x PCI-E x8 expansion slot
- 800-watt redundant power supply

Ordering Information

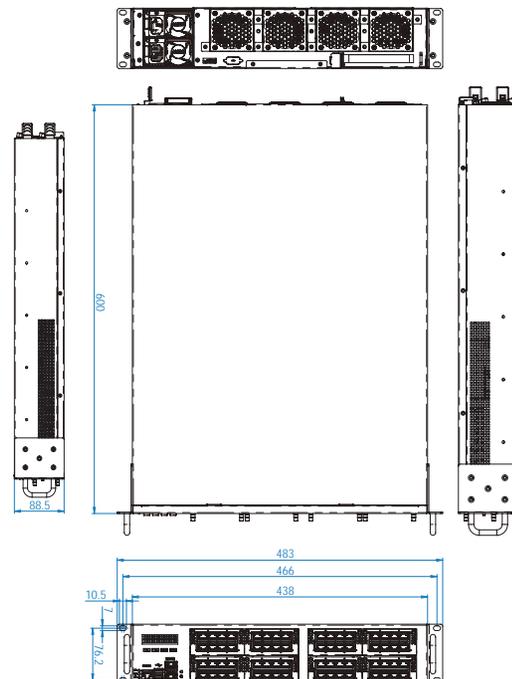
| | |
|---------|---|
| FWA9500 | 2U Rackmount Appliance, MBN900 Dual Intel® Xeon® SKL-SP, C624 PCH, 16x DDR4 DIMMs, Max. 66 GbE Ports, 800W RPSU, CPU Cooler, optional IPMI, 1x PCI-E x8 slot, Barebone without CPU/RAM/HDD/ Drive Bay Kit/IBN Card* |
|---------|---|

* For a complete system, IBN modules & some components must be ordered.

Accessories

| | |
|--------|----------------------|
| PK1-51 | Console cable, 160cm |
| IDN100 | IPMI 2.0 module |
| VGA21A | VGA cable, 40cm |

Dimensions

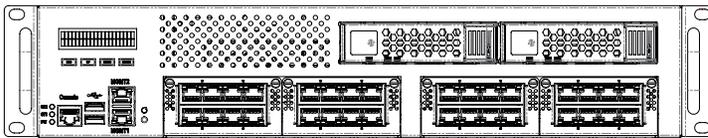


Optional Component BOM

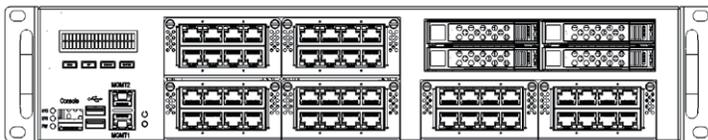
| Component BOM | Configuration Options | |
|---------------|--|--|
| Model Kit | Front IOs | Remarks |
| FWA9500 KIT1 | FWA9500-SHD: 4 NIC slots with swappable 2x 3.5" driver bay | For a complete system, component BOM, IBN module tray must be ordered. |
| FWA9500 KIT2 | FWA9500-SHQ: 6 NIC slots with swappable 4x 2.5" driver bay | |
| FWA9500 KIT3 | FWA9500-NIC: 8 NIC slots with internal max. 2x 2.5" drive bay | |

Front I/O

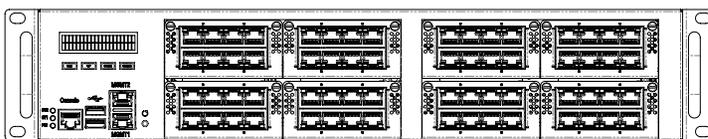
FWA9500-SHD



FWA9500-SHQ



FWA9500-NIC



FWA8800

Rackmount Network Appliance

Performance 1U Network Appliance with AMD EPYC™ Embedded 3000 Series & up to 17 GbE Ports



Specifications

| | |
|-----------------------|--|
| CPU | AMD EPYC™ Embedded 3000 series processor |
| Chipset | N/A |
| Memory | 4x DDR4 DIMMs up to 2666MHz; Max. 64GB UDIMM (ECC or non-ECC) or 128GB RDIMM |
| Display | 1x VGA (via optional IDN100 module) 1x LCM 2x16 character with 4 keypads |
| Ethernet | On board: 1x Intel® I210-AT GbE NIC module slots: 2x IBN cards, Max. 16 GbE |
| Bypass | Depend on IBN modules SKU |
| Expansion | 1x PCI-E x8 slot on rear panel |
| IPMI | Optioning module, compatible with IPMI 2.0 |
| Storage | 2x 2.5" or 1x 3.5" SATA drive bay 1x M.2 slot (M-key 2280, PCI-E x4 & SATA signal) |
| TPM | TPM 2.0 |
| I/O | 1x LCM 3x LED (Power/ HDD/ Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 2.0 1x MGMT (Share with IPMI NC-SI port) |
| Power Supply | Full range 250W ATX power supply or 300W 1+1 Redundant power supply |
| Dimensions | 438 mm (W) x 500 mm (D) x 44 mm (H) 17.24"(W) x 19.68"(D) x 1.73"(H) |
| Weight | 12kg (26.4 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20°C ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5% ~ 90% |
| Certification | CE/FCC |

Features

- AMD EPYC™ Embedded 3000 Series processor
- 4x DDR4 DIMMs; Max. 64GB UDIMM (ECC or non-ECC) or 128GB RDIMM
- 2x NIC module slots, Max. 16 GbE Ports
- Optional 2x swappable 2.5" drive bay
- Optional IPMI 2.0 module
- 1x M.2 slot

Ordering Information

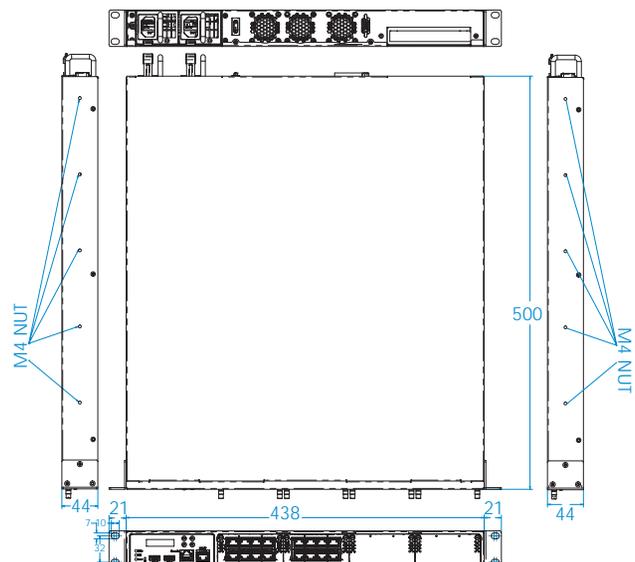
| | |
|-------------|--|
| FWA8800-E8 | 1U Rackmount Appliance, MBN806 AMD EPYC™ Embedded 3201 8C/8T SoC, 4x DDR4 DIMMs, Max. 17 GbE Ports, 250W PSU, CPU Cooler, optional IPMI, 1x PCI-E x8 slot, Barebone without RAM/HDD/Drive Bay Kit/IBN Card* |
| FWA8800-E8R | 1U Rackmount Appliance, MBN806 AMD EPYC™ Embedded 3201 8C/8T SoC, 4x DDR4 DIMMs, Max. 17 GbE Ports, 300W RPSU, CPU Cooler, optional IPMI, 1x PCI-E x8 slot, Barebone without RAM/HDD/Drive Bay Kit/IBN Card* |

* For a complete system, IBN modules & some components must be ordered.

Accessories

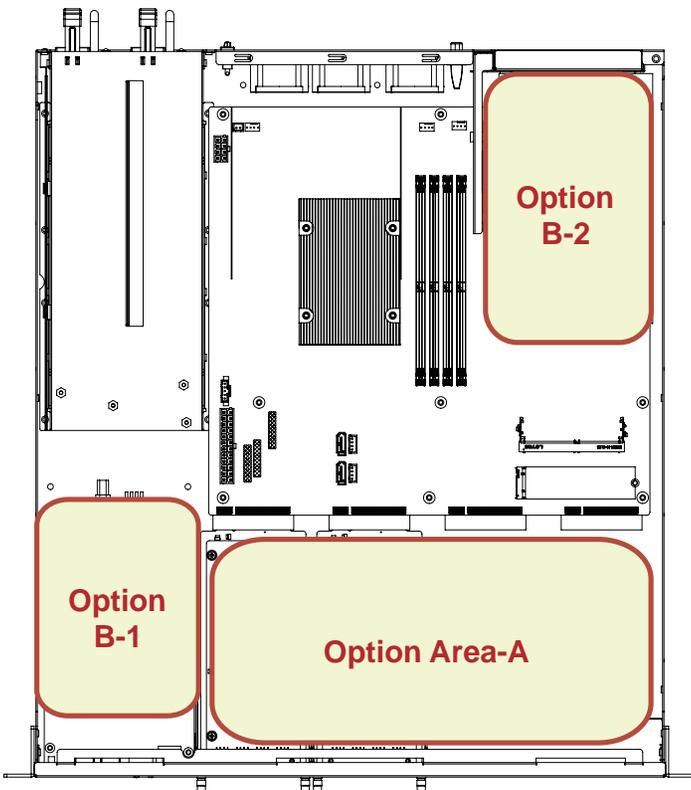
| | |
|--------|---|
| PK1-51 | Console cable, 160cm |
| VGA21A | VGA cable, 40cm |
| IDN100 | IPMI 2.0 module with Ibase proprietary DDR4 SO-DIMM golden finger |

Dimensions



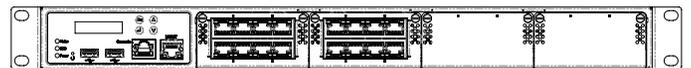
Optional Component BOM

| Component BOM | | |
|--|---|--------------|
| Option-A | Option-B | Model Kit |
| FWA8800-NIC: 2x NIC slots | None | FWA8800 KIT1 |
| | Expansion slot (Option B-2 only) | FWA8800 KIT2 |
| | 2x 2.5" drive bays + Expansion slot (Option B-1 + B-2) | FWA8800 KIT3 |
| | 1x 3.5" drive bay + Expansion slot (Option B-1 + B-2)(for Single PSU only) | FWA8800 KIT4 |
| FWA8800-SHD: 2x NIC slots + 2x swappable 2.5" drive bay | None | FWA8800 KIT5 |
| | Expansion slot (Option B-2 only) | FWA8800 KIT6 |

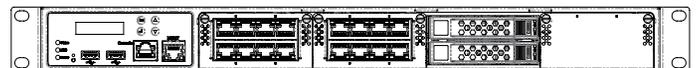


Front I/O

FWA8800-NIC



FWA8800-SHD



INA3600

Rackmount Network Appliance

Enterprise 1U Network Appliance with 10th Gen Intel® Xeon® / Core™ i9/i7/i5/i3 Pentium® Gold / Celeron® Processor & up to 14 GbE Ports



Features

- 10th Gen Intel® Xeon® / Core™ i9/i7/i5/i3 / Pentium® Gold / Celeron® Processor with W480E or H420E PCH (CML-S)
- 2x DDR4 UDIMMs, Max. 64GB (ECC/ Non-ECC)
- 6x RJ45 GbE on board
- Optional NIC slot
- 1x PCI-E x8 Expansion slot
- 250-Watt power supply

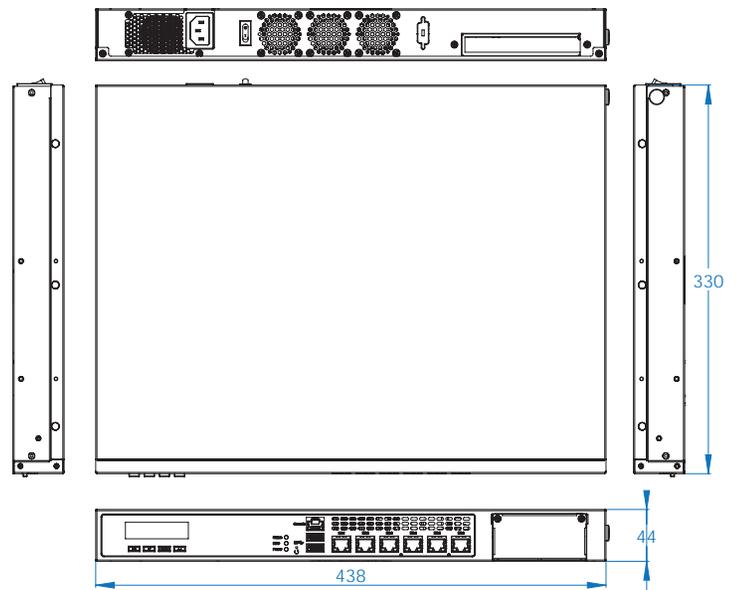
Specifications

| | |
|-----------------------|--|
| CPU | INA3600W: LGA1200 Socket for Intel® Xeon® / Core™ i9/i7/i5/i3 / Pentium® Gold / Celeron® processor INA3600H: LGA1200 Socket for Intel® Core™ i9/i7/i5/i3 / Pentium® Gold / Celeron® processor |
| Chipset | INA3600W: Intel® W480E PCH chipset INA3600H: Intel® H420E PCH chipset |
| Memory | 2x DDR4 UDIMMs Max. 64GB |
| Display | 1x VGA 1x LCM |
| Ethernet | INA3600W: 6x Intel® I211-AT GbE on board Optional NIC module slot, Max. 8 LAN ports INA3600H: 6x Intel® I211-AT GbE on board Optional NIC module slot, Max. 4 LAN ports |
| Bypass | 2-Segments, LAN3/4 & 5/6 |
| Expansion | 1x PCI-E x16 slot (8-lane) for INA3600W |
| IPMI | N/A |
| Storage | 3x 2.5" SATA drive bay (by SKU) |
| TPM | TPM2.0 |
| I/O | 1x LCM (by SKU) 3x LED (Power/ HDD/ Status) 1x Reset button 1x RJ45 console 2x USB3.1 |
| Power Supply | Full range 250W power supply |
| Dimensions | 438 (W) x 329 (D) x 44 (H) mm 17.24" (W) x 12.95" (D) x 1.73" (H) |
| Weight | 9.0 kg (19.84 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20° ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5 ~ 90% |
| Certification | CE/FCC |

Ordering Information

| | |
|----------|---|
| INA3600W | INA3600W 1U Rackmount Appliance, MBN807W Intel® CML-S, W480E PCH, 2x DDR4 DIMMs, Max. 14 LAN Ports, 250W PSU, CPU Cooler, 1x PCI-E x16 slot, 1x iIO2 LCM. Barebone without CPU/RAM/HDD/IBN Card |
| INA3600H | INA3600H 1U Rackmount Appliance, MBN807H Intel® CML-S, H420E PCH, 2x DDR4 DIMMs, Max. 10 LAN Ports, 250W PSU, CPU Cooler, 1x PCI-E x16 slot, 1x iIO2 LCM. Barebone without CPU/RAM/HDD/IBN Card |

Dimensions



FWA8708

Rackmount Network Appliance

Enterprise 1U Network Appliance with 9th or 8th Gen Intel® Xeon® / Core™ i7/i5/i3 Processor & up to 16 GbE Ports



Specifications

| | |
|-----------------------|--|
| CPU | FWA8708-C/CR: LGA1151 socket for 9th or 8th Gen Intel® Xeon® / Core™ i7/i5/i3 processors FWA8708-H/HR: LGA1151 socket for 9th or 8th Gen Intel® Core® i7/i5/i3 processors |
| Chipset | FWA8708-C/CR: Intel® C246 PCH chipset FWA8708-H/HR: Intel® H310 PCH chipset |
| Memory | FWA8708-C/CR: 4x DDR4 DIMMs, up to 2666MHz, Max. 64GB UDIMM (ECC or non-ECC) FWA8708-H/HR: 2x DDR4 DIMMs, up to 2666MHz, Max. 32GB UDIMM (Non-ECC) |
| Display | 1x VGA via pin-header 1x LCM |
| Ethernet | FWA8708-C/CR: On board: 6x Intel® I210AT + 2x Intel® I210IS GbE NIC module slot: 1x IBN card, Max. 8x GbE FWA8708-H/HR: On Board: 6x Intel® I211AT GbE |
| Bypass | 2x segment, LAN3/4 & 5/6 |
| Expansion | FWA8708-C/CR: 1 or 2x PCI-E slot on rear panel 1x Mini PCI-E slot (PCI-E, SATA signal) FWA8708-H/HR: 1x Mini PCI-E slot (SATA signal) |
| IPMI | Optional module, compliant with IPMI 2.0 |
| Storage | 2x 2.5" or 3.5" SATA drive bay 1x M.2 slot (M-key 2280, PCI-E x4 & SATA signal) |
| TPM | TPM 2.0 |
| I/O | 3x LED (Power / HDD / Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 3.0 1x MGMT (LAN1 share with IPMI NC-SI port) |
| Power Supply | Full range 250W ATX power supply or 300W 1+1 Redundant power supply |
| Dimensions | 438 mm (W) x 422 mm (D) x 44 mm (H) 17.24"(W) x 16.61"(D) x 1.73"(H) |
| Weight | 9.0 kg (19.84 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20°C ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5% ~ 90% |
| Certification | CE/FCC |

Features

- 9th or 8th Gen Intel® Xeon® / Core™ i7/i5/i3 Processor with C246 or H310 PCH
- 6x RJ45 GbE + 2x SFP GbE on board
- 4x or 2x DDR4 DIMMs; Max. 64GB (ECC/non-ECC)
- Optional IPMI 2.0 module (for FWA8708-C only)
- Optional NIC slot (for FWA8708-C only)
- 1x Mini PCI-E slot
- 1x M.2 slot (for FWA8708-C only)

Ordering Information

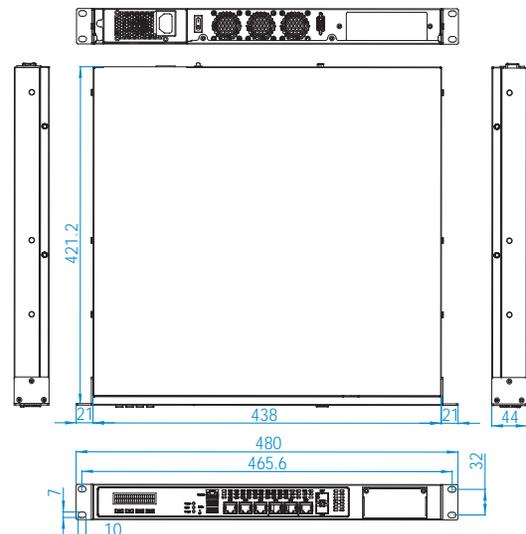
| | |
|------------|---|
| FWA8708-C | 1U Rackmount Appliance, MBN805C 9th or 8th Gen Intel® Xeon® / Core™ i7/i5/i3 Processors, C246 PCH, 4x DDR4 DIMMs, Max. 16 GbE Ports, 250W PSU, CPU Cooler, optional IPMI, Barebone without RAM/HDD/Drive Bay Kit/IBN Card* |
| FWA8708-CR | 1U Rackmount Appliance, MBN805C 9th or 8th Gen Intel® Xeon® / Core™ i7/i5/i3 Processors, C246 PCH, 4x DDR4 DIMMs, Max. 16 GbE Ports, 300W RPSU, CPU Cooler, optional IPMI, Barebone without RAM/HDD/Drive Bay Kit/IBN Card* |
| FWA8708-H | 1U Rackmount Appliance, MBN805H 9th or 8th Gen Intel® Core™ i7/i5/i3 Processors, H310 PCH, 2x DDR4 DIMMs, Max. 6 GbE Ports, 250W PSU, CPU Cooler, Barebone without RAM/HDD/Drive Bay Kit* |
| FWA8708-HR | 1U Rackmount Appliance, MBN805H 9th or 8th Gen Intel® Core™ i7/i5/i3 Processors, H310 PCH, 2x DDR4 DIMMs, Max. 6 GbE Ports, 300W RPSU, CPU Cooler, Barebone without RAM/HDD/Drive Bay Kit* |

*Must Order Component BOM

Accessories

| | |
|--------|---|
| PK1-51 | Console cable, 160cm |
| VGA21A | VGA cable, 40cm |
| IDN100 | IPMI 2.0 module with Ibase proprietary DDR4 SO-DIMM golden finger |

Dimensions

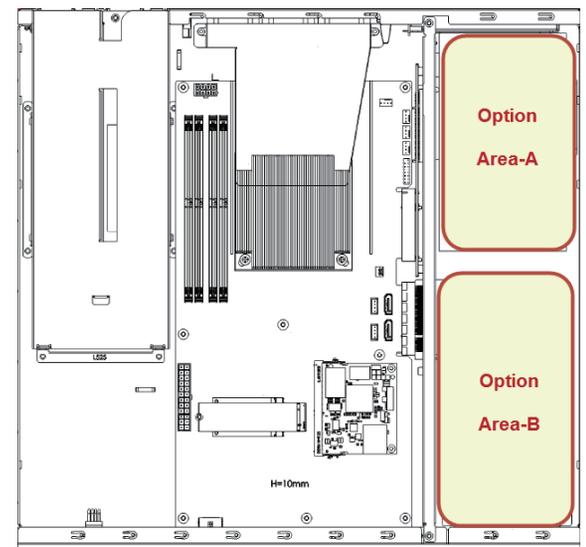


Optional Component BOM

| FWA8708 Series Configuration Options | | Component BOM |
|--|--|--|
| Option Area-A | Option Area-B | Model Kit |
| None | None | FWA8408/6 KIT1 |
| | 1x 3.5" HDD | FWA8408/6 KIT2 |
| | 2x 2.5" HDD | FWA8408/6 KIT3 |
| | 1x IBN Module (for FWA8708-C model only) | FWA8408 KIT4 (must order IBN module tray) |
| 1 x 3.5" HDD | None | FWA8408/6 KIT5 |
| | 1x 3.5" HDD | FWA8408/6 KIT6 |
| | 1x IBN Module (for FWA8708-C model only) | FWA8408 KIT7 (must order IBN module tray) |
| 2 x 2.5" HDD | None | FWA8408/6 KIT8 |
| | 1x IBN Module (for FWA8708-C model only) | FWA8408 KIT9 (must order IBN module tray) |
| 1 x Expansion Slot | 1x 3.5" HDD | FWA8408/6 KIT10 |
| | 2x 2.5" HDD | FWA8408/6 KIT11 |
| | 1x IBN Module (for FWA8708-C model only) | FWA8408 KIT12 (must order IBN module tray) |
| 1 x Expansion Slot+ 2.5" HDD | 1x 3.5" HDD | FWA8408/6 KIT13 |
| | 1x IBN Module (for FWA8708-C model only) | FWA8408 KIT14 (must order IBN module tray) |
| 2 x Expansion Slot (for FWA8708-C model only) | None | FWA8408 KIT15 |
| | 1x 3.5" HDD | FWA8408 KIT16 |
| | 2x 2.5" HDD | FWA8408 KIT17 |

Compatible Processors

| Compatible CPU | Memory | |
|---------------------------------|--------|---------|
| | ECC | Non-ECC |
| E-2176G (for FWA8708-C only) | V | V |
| i7-8700 | N/A | V |
| i7-8700T | N/A | V |
| i5-8500 | N/A | V |
| i5-8500T | N/A | V |
| i3-8100 | V | V |
| i3-8100T | V | V |
| G5400 | V | V |
| G5400T | V | V |
| G4900 | V | V |
| G4900T | V | V |



FWA8600

Rackmount Network Appliance

Enterprise 1U Network Appliance with Intel® Xeon® Processor D-2100 Series & up to 25 GbE Ports



Specifications

| | |
|-----------------------|--|
| CPU | Intel® Xeon® Processor D-2100 (BGA2518) |
| Chipset | N/A |
| Memory | 4x DDR4 DIMMs up to 2666MHz, Max. 128GB RDIMM |
| Display | 1x VGA (via optional IDN100 module) |
| Ethernet | On-board: 1x Intel® I210-AT GbE NIC module slots: 3x IBN cards (3rd slot max. 4-port) & 1x IBN-P401Q, Max. 24 GbE |
| Bypass | Depending on IBN modules SKU |
| Expansion | 1x PCI-E x8 slot (4-lane) on rear panel |
| IPMI | Optional module, compatible with IPMI 2.0 |
| Storage | 1x or 2x 2.5" SATA Drive bay 1x M.2 slot (M-key 2280, PCI-E x4 & SATA signal) |
| TPM | TPM 2.0 |
| I/O | 3x LED (Power / HDD / Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 2.0 1x MGMT (Share with IPMI NC-SI port) |
| Power Supply | Full range 250W ATX power supply or 300W 1+1 Redundant power supply |
| Dimensions | 438 mm (W) x 451 mm (D) x 44 mm (H) 17.24"(W) x 17.76"(D) x 1.73"(H) |
| Weight | 10.0 kg (22.05 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20°C ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5% ~ 90% |
| Certification | CE/FCC |

Features

- Verification of Intel® Select Solutions for uCPE with Ubuntu
- Intel® Xeon® Processor D-2100 Series
- 4x DDR4 RDIMMs; Max. 128 GB
- 1x Intel® I210-AT GbE
- 4x NIC modules; Max. 24 GbE ports
- Optional IPMI module
- 1x M.2 slot & optional PCI-E x8 expansion slot (4-lane)

Ordering Information

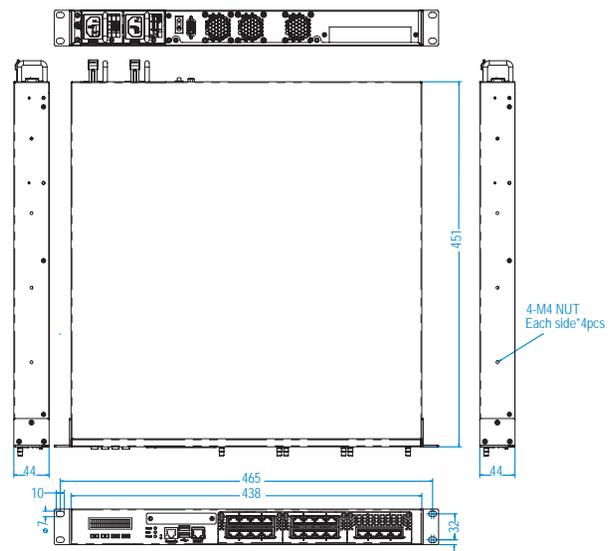
| | |
|--------------|---|
| FWA8600 | 1U Rackmount Appliance, MBN803 Intel® Xeon® Processor D-2100, 4x DDR4 DIMMs, Total Max. 25 GbE Ports, 250W PSU, CPU cooler, optional IPMI, 1x PCI-E x4 slot, Barebone without RAM/HDD/Drive Bay Kit/IBN Card* |
| FWA8600-RPSU | 1U Rackmount Appliance, MBN803 Intel® Xeon® Processor D-21XX, 4x DDR4 DIMMs, Max. 25 GbE Ports, 300W RPSU, CPU cooler, optional IPMI, 1x PCI-E x4 slot, Barebone without RAM/HDD/Drive Bay Kit/IBN Card* |

* For a complete system, IBN modules & some components must be ordered.

Accessories

| | |
|--------|----------------------|
| PK1-51 | Console cable, 160cm |
| IDN100 | IPMI 2.0 module |
| VGA21A | VGA cable, 40cm |

Dimensions

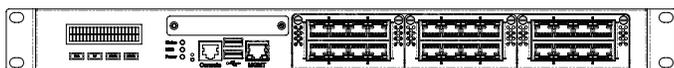


Optional Component BOM

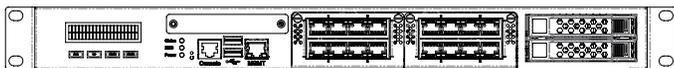
| Configuration Options | | Component BOM |
|---|--------------------------------|---------------|
| Front I/O Options | Storage & Expansion Options | Model Kits |
| FWA8600 & FWA8600-RPSU NIC: 3x IBN cards | None | FWA8600 KIT1 |
| | Expansion slot | FWA8600 KIT2 |
| | 1x 2.5" drive + Expansion slot | FWA8600 KIT3 |
| | 2x 2.5" drive bays | FWA8600 KIT4 |
| FWA8600 & FWA8600-RPSU SHD: 2x IBN cards + swappable 2x 2.5" drive bays | None | FWA8600 KIT5 |
| | Expansion slot | FWA8600 KIT6 |
| | 1x 2.5" drive + Expansion slot | FWA8600 KIT7 |
| | 2x 2.5" drive bays | FWA8600 KIT8 |
| FWA8600 & FWA8600-RPSU SHQ: 1x IBN cards + swappable 4x 2.5" drive bays | None | FWA8600 KIT9 |
| | Expansion slot | FWA8600 KIT10 |

Front I/O

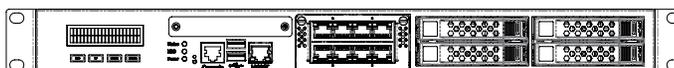
FWA8600-NIC



FWA8600-SHD



FWA8600-SHQ



FWA8506

Rackmount Network Appliance

Enterprise 1U Network Appliance with Intel® Atom® Processor C3000 Series 6 GbE & 4 10GbE Ports



Features

- Intel® Atom® Processor C3758
- 2x DDR4 DIMMs; Max. 32GB (UDIMM ECC / non-ECC) or 64GB (RDIMM)
- 6x PCI-E GbE RJ45 ports; 2x Advanced LAN Bypass pairs
- 4x 10GbE SFP+ ports
- 1x PCI-E slot, 1x CF slot

Specifications

| | |
|-----------------------|--|
| CPU | Intel® Atom® Processor C3758 (8 Cores, 2.2GHz) |
| Chipset | N/A |
| Memory | 2x DDR4 DIMMs up to 2400MHz, Max. 64GB RDIMM, Max. 32GB UDIMM (ECC or non-ECC) |
| Display | 1x LCM |
| Ethernet | 6x Intel® I211-AT GbE 1x Inphi CS4223 for 4x 10GbE |
| Bypass | 2x segment, LAN 3/4 & 5/6 |
| Expansion | 1x PCI-E x8 slot (4-lane) |
| IPMI | N/A |
| Storage | 2x 2.5" SATA drive bay 1x CF slot |
| TPM | TPM 1.2 |
| I/O | 3x LED (Power / HDD / Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 3.0 |
| Power Supply | Full range 250W ATX power supply |
| Dimensions | 438 mm (W) x 340 mm (D) x 44 mm (H) 17.24"(W) x 13.38"(D) x 1.73"(H) |
| Weight | 6.50 kg |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20°C ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5 ~ 90% |
| Certification | CE/FCC |

Ordering Information

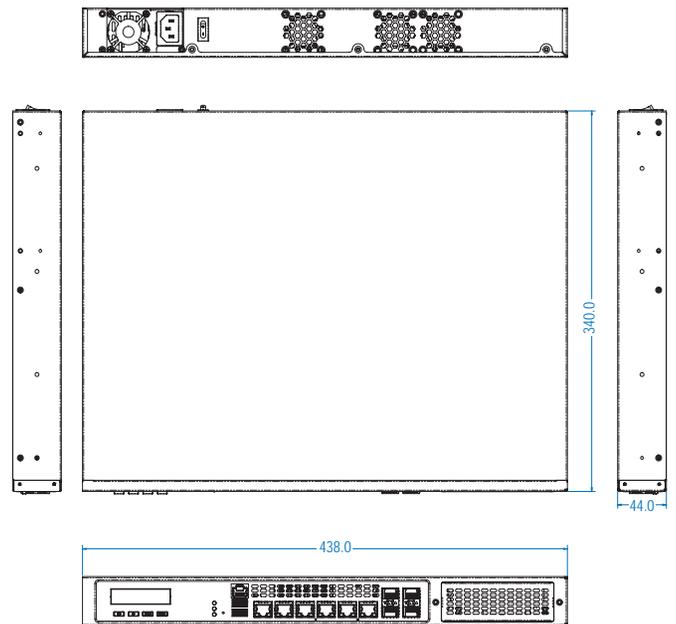
| | |
|---------|---|
| FWA8506 | 1U Rackmount Appliance, MBN802 Intel® Atom® Processor C3758, 2x DDR4 DIMMs, 6 GbE RJ45, 4 10GbE SFP+, 250W PSU, CPU Cooler, Barebone without RAM/HDD/Drive Bay Kit* |
|---------|---|

*Must Order Component BOM

Accessories

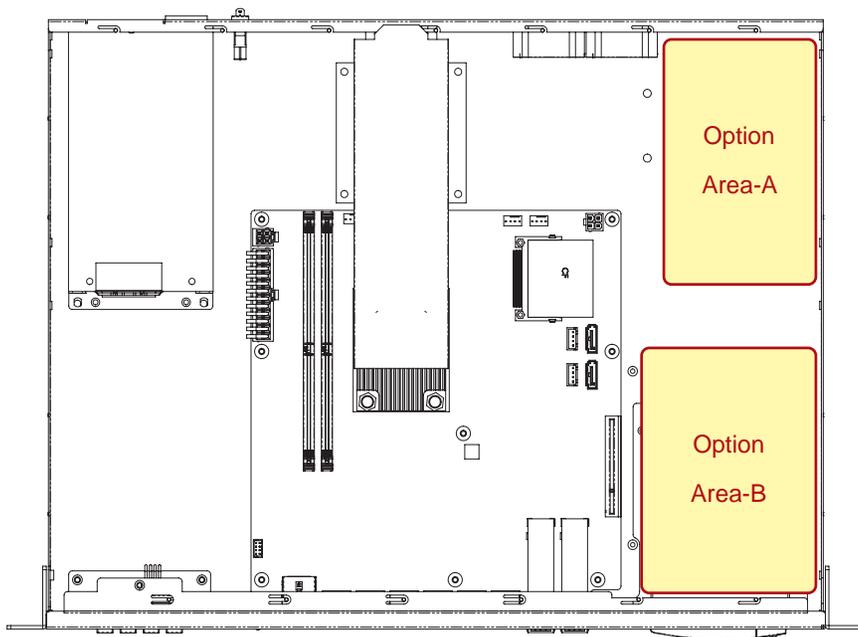
| | |
|--------|----------------------|
| PK1-51 | Console cable, 160cm |
|--------|----------------------|

Dimensions



Optional Component BOM

| Configuration Options | | Component BOM |
|-----------------------|------------------------------|---------------|
| Option Area-A | Option Area-B | Model Kit |
| None | None | FWA8506 KIT1 |
| None | 1x Expansion Slot | FWA8506 KIT2 |
| None | Swappable 2x 2.5" drive bays | FWA8506 KIT3 |
| 2x 2.5" HDD | None | FWA8506 KIT4 |
| 2x 2.5" HDD | 1x Expansion Slot | FWA8506 KIT5 |



FWA6706R

Rackmount Network Appliance

Entry 1U Network Appliance with Intel® Celeron® Processor N3350 & 6 GbE Ports



Features

- Intel® Celeron® Processor N3350, Dual-Core 1.1GHz
- 2x DDR3L SO-DIMMs; Max. 16GB (non-ECC)
- 6x PCI-E GbE ports; 1x advanced LAN Bypass pair
- 1x Mini PCI-E slot
- 1x CF slot

Specifications

| | |
|-----------------------|--|
| CPU | Intel® Celeron® Processor N3350, Dual-Core 1.1GHz |
| Chipset | N/A |
| Memory | 2x DDR3L SO-DIMMs up to 1866MHz, Max. 16GB (Non-ECC) |
| Display | 1x VGA via pin-header 1x LCM |
| Ethernet | 6x Intel® I211-AT GbE |
| Bypass | 1x segment, LAN 5/6 |
| Expansion | 1x Mini PCI-E slot (PCI-E & USB signal) |
| IPMI | N/A |
| Storage | 1x 2.5" SATA drive bay 1x CF slot |
| TPM | TPM 1.2 |
| I/O | 1x LCM 3x LED (Power / HDD / Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 3.0 |
| Power Supply | Full range 65W open frame |
| Dimensions | 438 mm (W) x 180 mm (D) x 44 mm (H) 17.24" (W) x 7.09" (D) x 1.73" (H) |
| Weight | 3 kg (6.62 lbs) |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20° ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5% ~ 90% |
| Certification | CE/FCC |

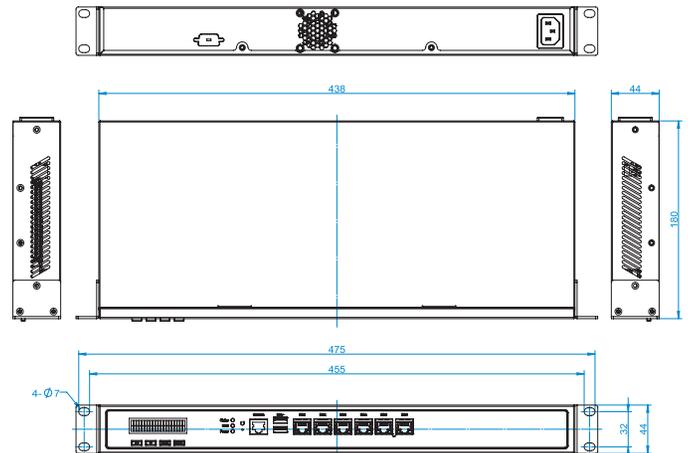
Ordering Information

| | |
|----------|---|
| FWA6706R | 1U Rackmount Appliance, MBN501 Intel® N3350 Dual-Core 1.1GHz, 2x DDR3L SO-DIMMs, Max. 6 GbE Ports, 65W Open Frame, CPU Cooler, Barebone without RAM/HDD |
|----------|---|

Accessories

| | |
|--------|----------------------|
| PK1-51 | Console cable, 160cm |
| VGA21A | VGA cable, 40cm |

Dimensions



FWA6706D

Desktop Network Appliance

Compact & Slim Fanless Network Appliance with Intel® Celeron® Processor N3350 & 6 GbE Ports



Specifications

| | |
|-----------------------|--|
| CPU | Intel® Celeron® Processor N3350, Dual-Core 1.1GHz |
| Chipset | N/A |
| Memory | 2x DDR3L SO-DIMMs up to 1866MHz, Max. 16GB (Non-ECC) |
| Display | 1x VGA via pin-header (by project) |
| Ethernet | 6x Intel® I211-AT GbE |
| Bypass | 1x segment, LAN5/6 |
| Expansion | 1x Mini PCI-E (PCI-E & USB signal) |
| IPMI | N/A |
| Storage | 1x 2.5" SATA drive bay 1x CF slot |
| TPM | TPM 1.2 |
| I/O | 3x LED (Power / HDD / Status) 1x Factory default button (GPIO) 1x RJ45 console 2x USB 3.0 |
| Power Supply | Full range 40W power adaptor / 12V |
| Dimensions | 227 mm (W) x 142 mm (D) x 44 mm (H) 8.94"(W) x 5.59"(D) x 1.73"(H) |
| Weight | 2 kg (4.41 lbs) |
| Operating Temperature | SSD: 0°C ~ 40°C (32°F ~ 104°F) HDD: 0°C ~ 35°C (32°F ~ 95°F) |
| Storage Temperature | -20° ~ 70°C (-4°F ~ 158°F) |
| Operating Humidity | 5% ~ 90% |
| Certification | CE/FCC |

Features

- Intel® Celeron® Processor N3350, Dual-Core 1.1GHz
- 2x DDR3L SO-DIMMs; Max. 16 GB (non-ECC)
- 6x PCI-E GbE ports; 1x advanced LAN Bypass pair
- 1x Mini PCI-E slot
- 1x CF slot

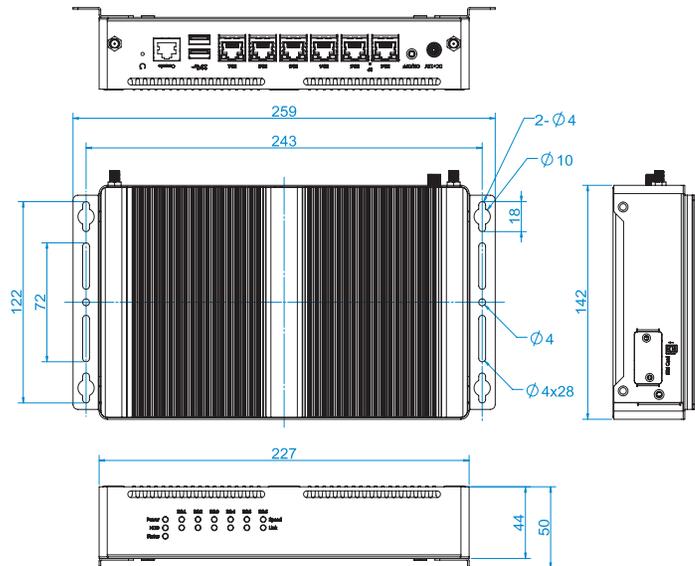
Ordering Information

| | |
|----------|---|
| FWA6706D | Desktop Appliance, Intel® Celeron® Processor N3350, 2x DDR3L SO-DIMMs, 6 GbE Ports, 40W Adaptor, 2.5" HDD Bracket, Barebone without RAM/HDD |
|----------|---|

Accessories

| | |
|--------|----------------------|
| PK1-51 | Console cable, 160cm |
|--------|----------------------|

Dimensions



AGS102

Desktop Network Appliance

Ultra-Compact Fanless System with Intel® Atom® x7/x5, Pentium® & Celeron® Processors



Features

- Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200 / Celeron® N3350 Series Processors
- GPIO 4-in & 4-out with isolation function
- Over/Under/Reverse voltage protection
- **Wide-range operating temperature from -40°C to 70°C**
- 9V~36V DC wide-range power input
- Supports DIN-rail mount & wall mount
- AGS102T: 4x RS232/422/485 serial ports
AGS102: 2x RS232/422/485 and 2x RS232 serial ports
- Rugged and fanless design

Specifications

| | |
|--------------------------|--|
| System Mainboard | IB801/ IB802T (F-1 Stepping) |
| CPU Type | Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200/ Celeron® N3350 Series Processors |
| System Speed | Up to 2.5GHz |
| Memory | 1x 4GB DDR3L-1866 SO-DIMM, Max. 8GB |
| Construction | Aluminum & steel |
| Chassis Color | Silver & Gray |
| Rear Panel External I/O | 1x DVI-I + 1x DisplayPort connector 4x USB 3.0 ports, 1x USB 2.0 port 2x RJ45 Gigabit Ethernet port 3x LED indicators (HDD, WLAN, WWAN) 1x power button with Green LED (Silver power button with Green LED for AGS102, Black power button with Blue LED for AGS102T) 1x 3-pin DC-in terminal block for 9V-36V 1x Antenna hole for WLAN module AGS102T: 2x RS232/422/485 ports for COM#3/COM#4 AGS102: 2x RS232 ports for COM#3/COM#4 1x 4-in & 4-out GPIO with isolation |
| Left Panel External I/O | 2x RS232/422/485 ports for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out (AGS102 for 2W mono speaker, AGS102T for stereo output) |
| Right Panel External I/O | 1x SIM card slot |
| Expansion slots | 1x Full-size Mini PCI-E socket (USB 2.0 + PCI-E + SATA) 1x 2230 M.2 E-Key socket for WLAN & BT (USB 2.0 + PCI-E) 1x 3042 M.2 B-Key socket for WWAN & SSD (USB 2.0 + SATA) |
| Storage | 1x mSATA socket (Mini-PCI-E) 1x 2242 M.2 B-Key socket for SSD |
| Mounting | DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included) |
| Dimensions | 160mm (W) x 110mm (D) x 44mm (H) 6.3" (W) x 4.33" (D) x 1.73" (H) |
| Weight | 1kg |
| Operating Temperature | -40°C~70°C (-40°F~158°F) (For E-series CPU) -20°C~60°C (-4°F~140°F) (For N-series CPU) |
| Storage Temperature | -40°C ~ 85°C (-40°F~185°F) |
| Relative Humidity | 5~90% @ 45°C, (non-condensing) |
| Vibration | Operating: 2.0 grms / 5~500Hz / random operation (with IEC 60068-2-64) Non-Operating: 3.0 grms / 5~500Hz / random operation (with IEC 60068-2-64) |
| Shock | Operating: 30G/11 ms Duration (with MIL-STD-810G) Non-operating: 40G/11 ms Duration (with MIL-STD-810G) |
| Certification | CE / LVD / FCC Class B / CCC (AGS102 Only) / UL |

Ordering Information

| | |
|------------------------------|--|
| AGS102-I50 | Intel® Atom® Processor x7-E3950, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS102-I40 | Intel® Atom® Processor x5-E3940, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS102-I30 | Intel® Atom® Processor x5-E3930, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS102-420 | Intel® Pentium® Processor N4200, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS102-335 | Intel® Celeron® Processor N3350, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| 60W power adaptor (optional) | 60W (12V@5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1 |
| Optional Accessories | WiFi/BT antenna kit, 4G/LTE antenna kit, GPS antenna kit |

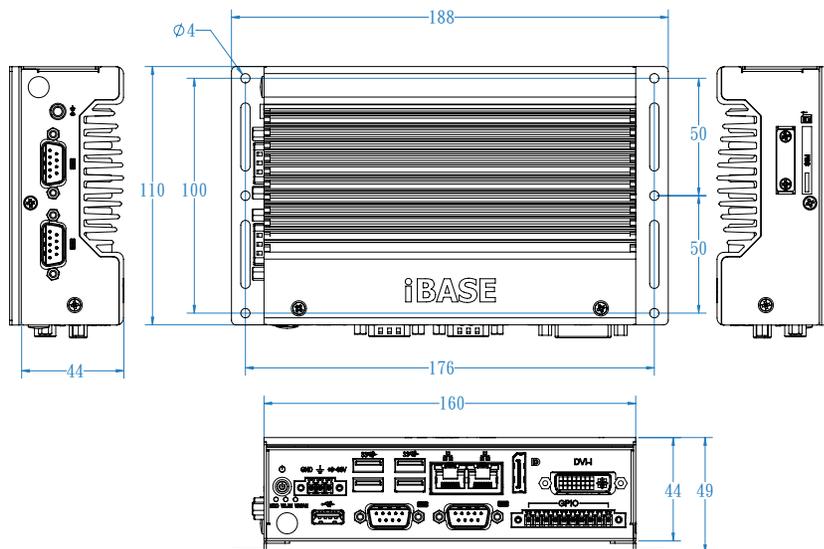
Intel® Entry Processor Ultra Low Power Reference Table

| Processor Number | Intel® Pentium® Processor - 14 nm Apollo-Lake SoC Platform | Intel® Celeron® Processor - 14 nm Apollo-Lake SoC Platform | Intel® Atom® Processor - 14nm Apollo-Lake-I SoC Platform | | |
|---|--|--|--|----------|----------|
| | N4200 | N3350 | x7-E3950 | x5-E3940 | x5-E3930 |
| Base Freq (GHz) | 1.1 | 1.1 | 1.6 | 1.6 | 1.3 |
| Intel® Turbo Boost Technology 2.0 (GHz) | 2.5 | 2.4 | 2.0 | 1.8 | 1.8 |
| Last Level Cache | 2M | 2M | 2M | 2M | 2M |
| Cores/Threads | 4/4 | 2/2 | 4/4 | 4/4 | 2/2 |
| Memory Speed (DDR3L) | 1866 | 1600 | 1866 | 1866 | 1866 |
| TDP | 6W | 6W | 12W | 9.5W | 6.5W |

DIN-rail Mounting



Dimensions and Drawing



Network Interface Modules

Expansion Module Cards
Fast, Multi-Function & Flexible
Networking Modules

| Model Name | | Port | Interface | Bypass Segment | Controller | Compatible Model |
|-------------|---|------|-----------|----------------|--------------------|--|
| IBN-R420BN |  | 4 | GbE RJ45 | 0 | 1x Intel® i350-AM4 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-R420B |  | 4 | GbE RJ45 | 2 | 1x Intel® i350-AM4 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-R840N |  | 8 | GbE RJ45 | 0 | 2x Intel® i350-AM4 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-R840 |  | 8 | GbE RJ45 | 4 | 2x Intel® i350-AM4 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-S400 |  | 4 | GbE SFP | 0 | 1x Intel® i350-AM4 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-S800 |  | 8 | GbE SFP | 0 | 2x Intel® i350-AM4 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-S420QSX |  | 4 | GbE SFP | 2 | Intel® i350-AM4 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-S420DSX |  | 2 | GbE SFP | 1 | Intel® i350-AM2 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |

Network Interface Modules

Expansion Module Cards Fast, Multi-Function, Flexible Networking Modules

| Model Name | Port | Interface | Bypass Segment | Controller | Compatible Model | |
|-------------|---|-----------|----------------|------------|------------------------|--|
| IBN-P400Q |  | 4 | 10GbE SFP+ | 0 | Intel® XL710-BM1 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-P400D |  | 2 | 10GbE SFP+ | 0 | Intel® X710-BM2 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-P401Q |  | 4 | 10GbE SFP+ | 0 | INPHI PHY WPCS4223C | FWA9500 FWA8600 |
| IBN-P420QSR |  | 4 | 10GbE SFP+ | 2 | Intel® XL710-BM1 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-P420DSR |  | 2 | 10GbE SFP+ | 1 | Intel® X710-BM2 | INA7600 FWA9500 FWA8800 FWA8708 FWA8600 FWA8408 |
| IBN-F200 |  | 2 | 25GbE SFP28 | 0 | Intel® XXV710-AM2 | INA7600 FWA9500 FWA8800 FWA8600 FWA8408 |
| IBN-C200 |  | 2 | 100G QSFP28 | 1 | TBD | INA7600 FWA8600 |

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