



Advanced Router and Firewall

1x WAN and 3x LAN Gigabit Ethernet ports in a Rugged Fan-less IP50 construction for tough environments. Configurable in transparent bridge mode or NAT/Routing mode. Full IPv4 and IPv6 compatible includes DHCP Server, Relay, PPPoE, IGMP Proxy and support for RIPv1 & v2, BGPv4 routing protocols. Supports Rules/policy scheduling and Application and URL whitelisting.

Graphical User Interface (GUI)

Configuration via on board Web interface with use-case wizards for easy configuration. Create rules effortlessly with One-Click Easy Rule creation directly from firewall logs, alongside Floating Rules applicable across all interfaces. Benefit from rich debug and traffic diagnostics capabilities, complemented by an integrated Restful API for seamless integration with higher-level systems. Additionally, gain access to CLI SSH/Console for maintenance tasks. Optional: Central Anybus Cybersecurity Console for management of a group of Defenders.

Product selection

DA	TΑ	SH	E	EΤ	

Defender 6004

Industrial Security Appliance

 $The {\it Anybus} \, Defender \, is \, an \, advanced \, industrial \, security \, appliance \, engineered$ to provide unparalleled protection for operational technology (OT) networks. Featuring a robust combination of NAT, Routing, Deep Packet Inspection (DPI), and VPN Server and Client functionalities, it serves as a cornerstone for safeguarding critical infrastructure against a myriad of cyber threats.

Key use cases:

- **OT/IT Segregation:** Enforce strict policies for domain separation.
- Address Conflict Avoidance: Manage IP addresses efficiently thorough implementation of Network Address Translation (NAT) and routing scenarios.
- Deep Packet Inspection: Ensure security of industrial protocols.
- IEC62443 Compliance: Implement security zones and conduits according to industry standards for precise machine isolation.
- Secure Plant-to-Plant OT Connections: Establish encrypted links • between facilities using WireGuard®, OpenSSL, and IPsec Virtual Private Network (VPN) protocols.



3 License options

The Anybus Defender comes pre-configured with one of 3 licensed options to meet your use-cases.



- NAT/FW: for network segmentation and translation
- **DPI/FW:** + Virtual Patching of legacy devices and granular Access Control with policy management of industrial protocol transactions
- PRO/FW: + Advanced VPN (WireGuard, OpenSSL & IPsec), Traffic shaping and routing functions & high availability capability

Status / Da	landard					- 1
System Inform	nation 🗡 🖨 😣	Interfaces			,	-08
Name	ICS380-Defender.localdomain	- WAN	•	autoselect	192.168.200.1	
User	admin@192.168.111.1 (Local Database)	-THUN	τ.	autoselect	10.10.231.10	
System	VMware Virtual Machine Senal: VMware-56 4d fc 94 1a 0c 19 5e-88 22 28 11 c6 7e 03 59 ICS360.Defender Device ID: 564dfc94-1a0e-195e-8822-2811c67e0359	diam	1	autoselect	192.168.111.253	
License	No information!	Thermal Se	nsors		,	-00
Version	2.5.2-RELEASE-2024013115 (amd54) built on Wed Jan 31 15:37:51 EST 2024	(Updating)				
Hardware crypto	AES OBC AES COM AES GOM AES IOM AES XTS					
Uptime	23 Days 11 Hours 10 Minutes 04 Seconds					
Current date/time	Wed Feb 28 14:12:22 UTC 2024					
ONS server(s)	+ 127.0.0.1					
Last config change	Mon Feb 5 4:17:07 UTC 2024					
State table size	0% (845000) Show states					
Load average	0.73, 0.56, 0.54					
CPU usage	125					
Memory usage	36% of 450 MB					

Article nr:	Description:
ABD6004-NATFW	Industrial Security Appliance - DIN Rail - 4x1Gbit RJ45 - NAT/FW Perpetual License inc. 3Y support
ABD6004-DPIFW	Industrial Security Appliance - DIN Rail - 4x1Gbit RJ45 - DPI/FW Perpetual License inc. 3Y support
ABD6004-PROFW	Industrial Security Appliance - DIN Rail - 4x1Gbit RJ45 - PRO/FW Perpetual License inc. 3Y support



DATASHEET



Defender 6004

EtherNet/IP^{*}



Rich Network Security Controls

Anybus Defenders uphold a Deny by Default policy, ensuring that all network communication traffic is prohibited unless explicitly permitted by the system in both inbound and outbound directions. Simplified NAT Configuration facilitates the setup for single or multiple IP addresses, subnets, or transparent layer 2 firewalling, capable of bridging interfaces and filtering traffic. Enjoy seamless high-throughput Deep Packet Inspection (DPI) for common industrial protocols, supported by an intuitive user interface equipped with auto-learn capabilities to minimize manual rule creation. Integrated of Snort and Suricata, the Defenders offer robust Intrusion Protection capabilities, allowing for virtual patching scenarios. Monitoring and reporting functionalities include Arp and bandwidth monitoring accessible through API. Standard features encompass email reports, syslog integration, and integration with Telegram Messenger as well as Pushover Notifications, while optional NetFlow integration provides additional integration options.

Asset Discovery & Inventory

The platform incorporates a specialized network asset identification scanner meticulously tailored for OT/ICS devices, offering comprehensive visibility into connected assets. Utilizing a range of industrial-specific protocols and methodologies, it seamlessly discovers, queries, and identifies assets within the network. Extracted information includes crucial details such as make, type, software version, patch level, and serial number, accompanied by an accuracy score for reliability assessment. Accessible through the intuitive Web GUI or centrally propagated to the optional Central Anybus Cybersecurity Console, this information empowers users with actionable insights for enhanced network management and security.



Features License Type	NAT/FW	DPI/FW	PRO/FW
Simple NAT Wizard, 1:1, 1:∞	~	<	~
Stateful Firewall	×	~	V
Transparent/Bridge Mode	~	✓	<
Certificate Management	V	~	V
Central Anybus Cybersecurity Console Support	~	✓	✓
Asset Discovery & Inventory	×	V	V
Email, Syslog, Telegram Messenger and Pushover Notifications	~	✓	✓
Remote Client VPN		~	V
RADIUS, LDAP/AD Authentication		<	✓
Industrial Protocol DPI with traffic analyser to learn traffic and allow easy config (Ethernet/IP CIP & Modbus)		*	*
Virtual Patching through IPS (Snort, Suricata)		<	✓
WireGuard*, OpenSSL & IPsec VPN		V	V
DHCP Server & DHCP Forwarding		<	<
Rules/Policy Scheduler (by date/time/duration)		~	~
Captive Portal			✓
RIPv1 & v2, BGPv4 routing protocols			<
Load Balancing, Multi-WAN			✓
Traffic Shaping			~
High Availability Redundancy			✓





Defender 6004

General

Dimensions with connectors	140,4 x 69,6 x 179,7 mm / 5,53 x 2,74 x 7,07 inch
Weight	1270 gr, 2.8 lbs
IP rating	IP50 construction
Housing material	Metal enclosure
Mounting	DIN rail according to EN50022
Operating temperature	0°-50°C 32°-122°F
Humidity	Non-Condensing 0%- 85%
Configuration	Via Web interface locally or optional Anybus Cybersecurity Console capable of managing several Defenders simultaneously. CLI SSH/Console access for maintenance tasks.
Certification	CE, 2011/65/EU (RoHS)

Power

Input voltage	24V DC Power Entry
Current consumption	Max 1100 mA @ 24 Volts, 26,4 Watts (based on maximum ratings)

Network interfaces

WAN	One (1) RJ45 Gigabit Ethernet	
LAN	Three (3) RJ45 Gigabit Ethernet	
*LAN ports are individually configurable and can be reconfigured as a 2nd WAN port for appropriate use-cases.		

Software Specifications

Operating Modes	Bridge / Gateway mode
Choice of security license	NAT/FW, DPI/FW, PRO/FW
License type	Perpetual
Warranty	3 years support and warranty included



HMS Networks AB (publ) is a market-leading provider of solutions in industrial information and communication technology (Industrial ICT). HMS develops and manufactures products under the Anybus[®], Ewon[®], Intesis[®] and Ixxat[®] brands. Headquartered in Halmstad, Sweden. HMS is listed on the NASDAQ OMX in Stockholm. Anybus[®] is a registered trademark of HMS Industrial Networks AB, Sweden, USA, Germany and other countries. Other marks and words belong to their respective companies. All other product or service names mentioned in this document are trademarks of their respective companies. Part No: MMA312 Version 4 03/2019 - © HMS Industrial Networks - All rights reserved - HMS reserves the right to make modifications without prior notice.

