

DATASHEET

VT AIR 300

ROUTER - MODEM - FIREWALL - VPN

Supported by:

Federal Ministry
for Economic Affairs
and Energy

on the basis of a decision
by the German Bundestag



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Advanced Industrial Router

Hardware

CPU	4 Core ARM64 (Marvell ARMADA 8040)	SHDSL	CO/CPE 1 Channel Mode EFM annex A/B TCPAM Auto/4/8/16/32/64/128 Bitrate Auto/32/64/128/256/512/1024/2048/4096/8192/16384 kbit/s ETSI SDSL, ETSI SDSL.bis, IEEE EFM, ITU G.shdsl, ITU G.shdsl.bis, ITU G.hs, ITU G.bond; Emergency Freeze; Modes: Point to Point-, Star-, Line-, and Ring (2 Modems required)
RAM	4GB DDR4		
SSD	16 GB eMMC		
Console	USB Console		
NIC	2x SFP+/SFP (10000/1000 Mbit/s) 4x RJ45 (1000/100/10 Mbit/s)		
USB	2x USB 2.0		
Power	12/24 Volt: 1x 2,5mm Barrel Connector with turning Connector 1x Phoenix Power Connector	VDSL	ADSL ITU-T G.992.1/3/5; VDSL2 ITU-T G.993.2 (Profiles 8, 12, 17, 30 MHz), TR-048/067, TR-100, TR-114, ITU-T G.inp, ITU-T G.vector; Annex B/J or A/I ADSL2+ up to 24 Mbps, VDSL2 up to 200 Mbps
Extension	2x DSL (VDSL/SHDSL) 1x LTE 1x mSATA (modular extendable/optional)		
Temperature	-20C - 50C (VDSL) -20C - 50C (SHDSL) -40C - 60C	LTE/3G	LTE: B1 (2100), B2 (1900), B3 (1800), B4 (AWS), B7 (2600), B12 (700ac), B13 (700c), B20 (800DD), B5 (850), B25 (1900), B26 (US 850 Ext), B29 (US 700de Lower), B41 (TDD 2500), B30 (2300 WCS) 3G/UMTS: B1 (2100), B2 (1900), B8 (900), B4 (AWS), B3 (1800), B5 (850) 300Mbit/s Download, 50Mbit/s Upload
Humidity	10% - 90% (non-condensing)		
Certificates	ROHS, CE, FCC Industrial EMV: Electromagnetic Immunity: EN 55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 61000-6-2, EN 61326-1, IEC 61131-2 Electromagnetic Emission: FCC Class B, EN 55032, EN 61000-3-2, EN 61000-3-3, EN 61000-6-4 Safety: EN 60950-1	Dimensions	L: 180 mm W: 125 mm H: 38 mm DIN Rail Mount
Grounding	DIN Rail, Phoenix Connector		

Throughput

Packages per Second

Test	Speed
Firewall	~1.300.000 pps

iperf3

Test	Speed
Firewall	16.00 Gb/s
App Control/Intrusion Protection ⁴	1.50 Gb/s
IPSec VPN (AES-256 GCM)	1.36 Gb/s
OpenVPN (AES-256 GCM)	320 Mb/s
Wireguard	1.06 Gb/s

IMIX Traffic

Test	Speed
Firewall	2.60 Gb/s
App Control/Intrusion Protection ⁴	772 Mb/s
IPSec VPN (AES-256 GCM)	520 Mb/s
OpenVPN (AES-256 GCM)	96 Mb/s
Wireguard	424 Mb/s

XDP IMIX Traffic*

Test	Speed
Routing	6.06 Gb/s
Firewall	5.25 Gb/s

1. Throughput Data are based on bidirectional traffic

2. Iperf3 Traffic is TCP 1460 Bytes + TCP framing

3. IMIX Traffic is sets of UDP Traffic 7x 64 Byte packets, 4x 594 Byte packets, 1x 1514 Byte packets (Ethernet FCS not counted)

4. App Control/Intrusion Protection is Worst Case Performance

* XDP Support available Q2 2021