

## FEATURE HIGHLIGHTS



- Wi-Fi 5 2x2 MU-MIMO with 802.11ac peak speed 867 Mbps
- Easily Expandable Mesh WiFi System
- 1 x RJ45 for 10/100/1000Mbps BaseT WAN
- 4 x RJ45 for 10/100/1000Mbps BaseT LAN
- DNV-GL Marine application
- 1x micro-SD slot for flexible use
- Firewall and VPN for security connection
- Backup WAN interfaces for connection reliability
- Industrial EMC protection, -40 to +75°C wide-range temperature operation
- Rugged metal case with wall or DIN-Rail mount
- PoE PD support for flexible deployment

## PRODUCT DESCRIPTION

ATOP AWR is an advanced device that allows a very tangible scale-up of almost any industrial wireless infrastructure. In addition to high EMC protection, wide-temperature operation, superb hardware and advanced features, AWR will provide high-speed internet access with load balancing and high degrees of security, high speeds and advanced configuration options.



### Quad-ARM Cortex A7 CPU

AWR integrates an industrial-grade Quad-core A7 ARM CPU, enabling the processing power you need to filter heavy traffic over firewalls, routing, forwarding and security measures.



### High-Performance

With its integrated IEEE802.11ac wave-2 feature and supporting 2x2 concurrent MU-MIMO RF, AWR provides high-throughput connections through 2.4 GHz and 5.0 GHz bands.



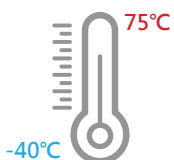
### Wi-Fi Mesh

AWR's advanced chipset allows you to set up several devices as a mesh network, achieving a self-healing network that adjusts its topology based on need-perfect for dynamic applications.



### Security

Integrating firewall, zone forwarding, and VPN features, ATOP AWR allows you to connect your industrial network to the internet without fearing intrusions into your organization data.



### Harsh Environments

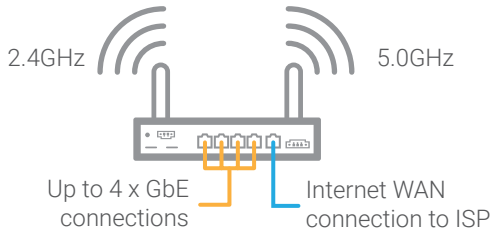
ATOP AWR is proven to run at its maximum loading in the harshest EMC and climate environments.



### Reliability

With a rugged metal housing and power redundancy, AWR is resistive to damage in harsh industrial environments.

## APPLICATION

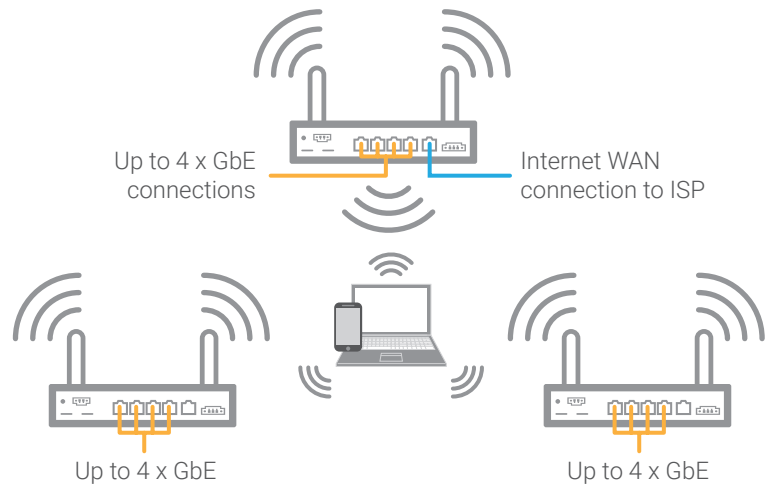


### As a Wi-Fi DBDC Router

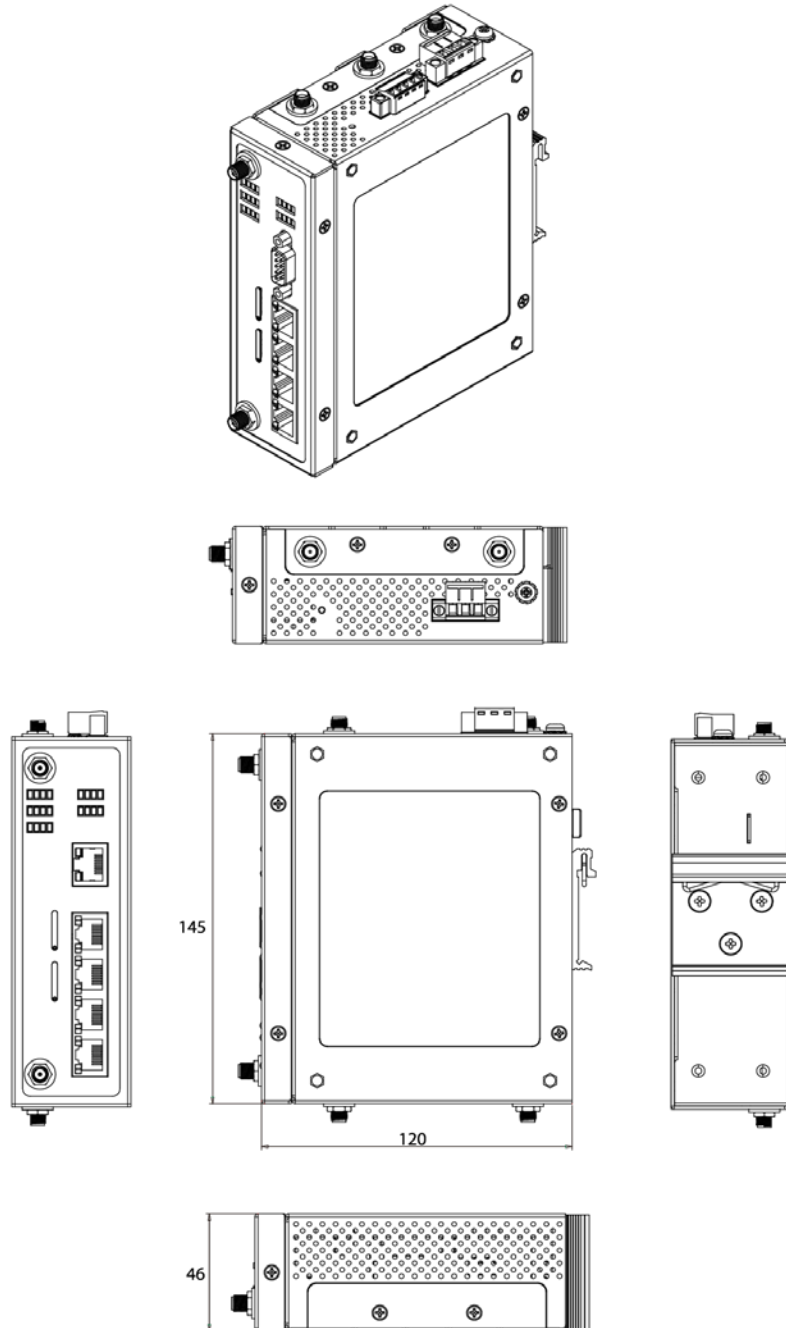
AWR5805's simplest operating mode is as a router/access point. Use it to connect to the internet through your broadband provider via PPPoE, Static IP or DHCP and provide internet connection to Wi-Fi and wired clients. With AWR you can define your own wireless access policy and set up a Firewall and VPN connection based on your needs.

### As a Wi-Fi Mesh Primary Router

AWR5805 is designed to act as a mesh router or as a mesh node, and the configuration of one or both radios to work in mesh mode takes barely any time. No more fussing with topology changes or complicated wiring! With Wi-Fi mesh, all nodes can communicate with each other and the transmission paths are dynamically adjusted if a change in signal strength or topology is detected. So, even if a device is temporarily inaccessible due to interference or position, the network will still work perfectly. Mesh functionality can be combined with all other features of AWR5805.



## DIMENSIONS & LAYOUT



AWR5805 SERIES: 145 x 120 x 46 mm

## SPECIFICATIONS

Hardware Specifications		
Model Name	AWR5805	
SOC		
CPU	ARM Cortex A7, Quad-Core	
Network Interfaces/Connectivity		
Wi-Fi	802.11ac wave 2(5GHz), 802.11a/b/g/n(2.4GHz/5GHz) MU-MIMO 2x2 (2 streams) Wi-Fi Mesh ready	
Ethernet ports	Standard	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X)
	Ports	5x 10/100/1000 BASE-TX RJ-45 1 x WAN 4 x LAN
Antennas		
Wi-Fi	2x SMA(M) antennas	
Watchdog		
Hardware WD Reset	Yes	
External IO Interfaces		
Default/Reset Button	1 key	
SD Slot	1x micro-SD slot	
LED Indicators		
LEDs	PWR, 2.4GHz Wi-Fi, 5.0 GHz Wi-Fi, LAN, WAN	
Power		
Voltage Input	DC Power : 12 to 48V	
Consumption	< 18W	
Redundancy	No	
Connector	3-pin Terminal block	
Reverse polarity protection	Yes	
PoE	PoE PD, 802.3at, Mode A	
Mechanicals		
Casing material	Metal housing	
Dimension L x W x H (mm)	145 x 120 x 46	
Weight	726 g	
Installation	DIN-Rail or Wall-Mount (optional kit)	
Ingress Protection Rating	IP30 protection	
Environment limits		
Operating Temperature	-40°C to +75°C (-22°F to +158°F)	
Storage Temperature	-40°C to +85°C (-40°F to +185°F)	
Ambient Relative Humidity	5% to 95% RH, (non-condensing)	

Software Specifications	
<b>Network</b>	
IPv4/IPv6	DHCP server
	DHCP Client/Static IP/PPPoE
Connection	Telnet, SSH, TFTP/SFTP, Http, Https, SNMP
Other Protocols	NTP, DNS, 802.1Q VLAN, QoS, VRRP, MQTT
<b>Security</b>	
Firewall	Access control list (ACL)
	Port Forwarding
	Attack Prevention (Inserted after Port Forwarding)
VPN	IPSEC, OPEN-VPN, L2TP, PPTP
<b>Reliability</b>	
Dev Redundancy	VRRP
Schedule operation	Schedule control of application
<b>WLAN</b>	
WLAN Connection	AP (802.11 a/b/g/n/ac), Mesh
Wi-Fi Security	OWE/WPA-PSK/WPA2-PSK/WPA3-PSK (SAE)
<b>Management</b>	
System Configuration	WEB, Telnet, SSH
Firmware upgrade	WEB, TFTP
System Log	Log data to Local memory, remote logger, local flash
SNMP	SNMP v1/v2/v3
Diagnostics	Ping, Traceroute, Nslookup
Remote Management	ATOP OKRA remote management system
<b>Statistics</b>	
Statistics	Memory, Mobile, WAN, Wireless, LAN

## REGULATORY APPROVALS

Regulatory Approvals				
Safety	UL/IEC 62368-1, IEC60950-1, EN62368-1			
EMC	EN55032, EN61000-6-4, EN55024, EN61000-6-2, FCC Part 15B, FCC Part 18			
Wi-Fi	EN300328 for WIFI b/g/n 2.4G, EN301893 for WIFI a/n/ac 5G, EN62311 MPE Report, Part 15C for 2.4G b/g/n, Part 15E for 5G B1/B4 a/n/ac			
Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge	±6KV	3
		Air Discharge	±8KV	3
IEC 61000-4-3	RS	Enclosure Port	10 (V/m) , 80-1000MHz	3
			3 (V/m), 1.4-2.0GHz	3
			10 (V/m), 2.0 to 2.7GHz	3
IEC 61000-4-4	EFT	DC Power Port Signal Port	±2.0KV@ 5.0kHz	3
			±1.0KV @ 5.0kHz	3
IEC 61000-4-5	Surge	DC Power Port Signal Port	Line-to-Line ±1KV	3
			Line-to-Earth ±2KV	3
			Line-to-Earth ±2.0KV	3
IEC 61000-4-6	CS	DC Power Port Signal Port	10V, 150KHz to 80MHz, 80%AM	3
			10V, 150KHz to 80MHz, 80%AM	3
IEC 61000-4-8	PFMF	Enclosure	30A/m (r.m.s), 50Hz or 60Hz	4
Shock	IEC 60068-2-27			
Drop	IEC 60068-2-32			
Vibration	IEC 60068-2-64			
Others	RoHS, including 2015 amendment REACH Conflict Mineral Free			
Warranty	5 years			

## ORDERING INFORMATION

### Ordering information

Model	Ethernet (RJ45)	WI-FI	BT	LoRa	PoE	GPS
AWR5805	1x WAN, 4x LAN	802.11/a/b/g/n/ac	-	-	-	-
AWR5805P	1x WAN, 4x LAN	802.11/a/b/g/n/ac	-	-	Yes	-

### Optional Accessories

Model	Part Number	Description
AD1048-24FS	50500481240001G	DIN-Rail Power Supply Input: 100-240VAC / 120-370VDC; Output: 2A@24VDC
UV336-1230	50500361120001G	Power adapter Input: 100-240VAC; Output: 3A@12VDC; US plug