

Windbit Ares-C640

Windbit Ares-C640: High performance edge router

Introduction

The Ares-C640 is a powerful and flexible platform thanks to an optimized hardware architecture that includes several 10Gbps interfaces.

This new device with a 16-core architecture delivers high performance and low processing latencies being the optimal solution for headquarters or main offices with top requirements for a large number of users.

Together, HW innovation and SW evolution in this device offer customers a high level of productivity and a very good user experience.

It is a carrier-grade device that can migrate to SDWAN or secure services in an easy way delivering all the Teldat SDWAN advantages to IT managers.

Interfaces

Multi-WAN services	4x SFP+ ports
Individual/dedicated LAN ports	6x Combo GE ports
1*USB 2.0+1*USB 3.0	For future purposes
1x extension module	For future purposes
Console port	Yes
Reset button	Yes

Destacar

- Ready for 20Gbps aggregated IMIX services
- Traditional or SDWAN integrated router
- Complete VPN server for headquarters
- Optimal solution for regional/big branch offices
- Pluggable redundant switching power supply
- Front to back ventilation ready for datacenters



Competitive Advantage

Flexible platform for all scenarios	It is the perfect solution for multi-WAN or multi-LAN scenarios, supporting a wide variety of connectivity configurations.
SDWAN router	The Ares-C640 enables a smooth transition from traditional communications in remote offices to a hybrid SDWAN network.
Top level VPN server	Security in communications or online work is solved with the new Ares-C640 device model thanks to its encryption capacity and redundancy features.

Key Features

- **High performance for advanced routing services** Reliable in scenarios up to 20Gbps IMIX aggregated with services thanks to its powerful hardware multi-core architecture
- **Powerful hardware encryption** Latest generation of multi-core CPU with integrated hardware encryption reaching up to 6.5Gbps of encrypted bandwidth with 2500 established tunnels.
- **Flexible high speed ports configuration** 4x 10Gbps interfaces are available in any type of configuration, as WAN or LAN ports. And 6x Combo GE(Copper/Fiber) interfaces for full flexibility in all scenarios.
- **Pluggable redundant switching power supply 150W** Critical services must be available 24 hours a day, 7 days a week, 365 days a year, so for these scenarios, the customer will always introduce devices with redundant power supply.
- **Corporate security cloud solutions** The Ares-C640 supports software security features and additional cloud services like be.Safe Smart for soft requirements in security and be.Safe Premium for complete threat protection.
- **Professional and carrier grade software features** The Ares-C640 software is the standard Teldat OS that has been validated in many validation processes for corporate services around the world
- **Console port for out-of-band management** Operator/integrator managed services require out-of-band management to prevent them from interfering with customer networks. A console port is available for local managers with secure access.

CARACTERÍSTICA TÉCNICA DEL HARDWARE

10Gbps interfaces

4x 10GBase-R (SFP+) ports
SFP+: Up to 10Gbps

Dimensions and Weight

430 x 444 x 44 mm. 430 x 483 x 44 mm (with brackets)
Approximate weight: 6,675 Kg
Format: 19-inch chassis with rack accessory; front to back fan?flow design

2x Pluggable redundant switching power

100Vac/240Vac, Minimum: 90Vac, Maximum: 264 Vac
60Hz/50Hz, Minimum: 47Hz, Maximum: 63Hz
Max. Power Consumption 200W

1Gbps interfaces

6x Combo GE ports
RJ45: 10Base-T, 100Base-T, 1000Base-T
SFP: 1000Base-X, SFP/SFP+ MSA Compliant

Environmental specifications

Temperature: 0 to 40 °C, Storage: -40°C - +70°C
Atmospheric pressure: 700 to 1060 mbars
Operational: 5-90% non-condensing

MTBF ?100,000 Hour

CARACTERÍSTICA TÉCNICA DEL SOFTWARE

IP protocol

ARP, MTU discovery, NAT/PAT, ICMP, BFD, Netflos(IPFix)
RIPv1/2, OSPFv3, BGPv4, Load balancing, PBR-Policy Based
static/dynamic Routing
Virtual Router Forwarding (Multi-VRF)

Security

IPSec support in transport and tunnel mode. DMVPN
Pre-shared authentication, RSA, Certificates, MD5, SHA-1
Encrypted: DES (56 bits), 3DES (168 bits), AES (128, 192 and 256 bits)

IP services

DHCP, DNS, FTP, SFTP, SSH server v1/2, Telnet server and client
NTP, Syslog, SCP client. TFTP server
DHCP, dynDNS relay

IPv6

Dual Stack, IPv6oIPv4, IPv4oIPv6, GRE, 6rd, DHCP, ICMPv6, SLAAC
Static and dynamic routing RIPng, OSPFv3

SDWAN networks

Overlay over hybrid networks with App-aware routing, QoS and Visibility
Central SD-WAN flow control including Zero Touch Provisioning
Applications Service Chaining

CARACTERÍSTICA TÉCNICAS ADICIONALES

Console interface

RJ45 connector with proprietary pinouts (including adapter)
Type RS232, N81
Default speed 115200 bps

Memory

RAM: 16GB DDR4
FLASH: 16GB eMMC

IP protocol (2)

Multicast: IGMP (v1,v2, v3), PIM-SM, PIM-SSM,
IPSLA service probes (delay, package loss, jitter)
High availability: VRRP

Security (2)

Certificates: CSR, SCEP, X.509v3, PKIX, LDAP revocation
Static and dynamic access lists(ACLs) and session-based Firewall
DoS/DDoS detection, 802.1X control access

Quality of Service QoS

IP Precedence, DiffServ and COS labeling for BW management
BW prioritization and limitation
Up to 16 queues per interface. PQ, LLQ, WFQ, CBWFQ, WRED

Management

CLI configuration and storage in a plain text file
Cloud Net Manager tool(HTTPS based)
RADIUS and TACACS+ AAA support, SNMPv1, v2c y v3

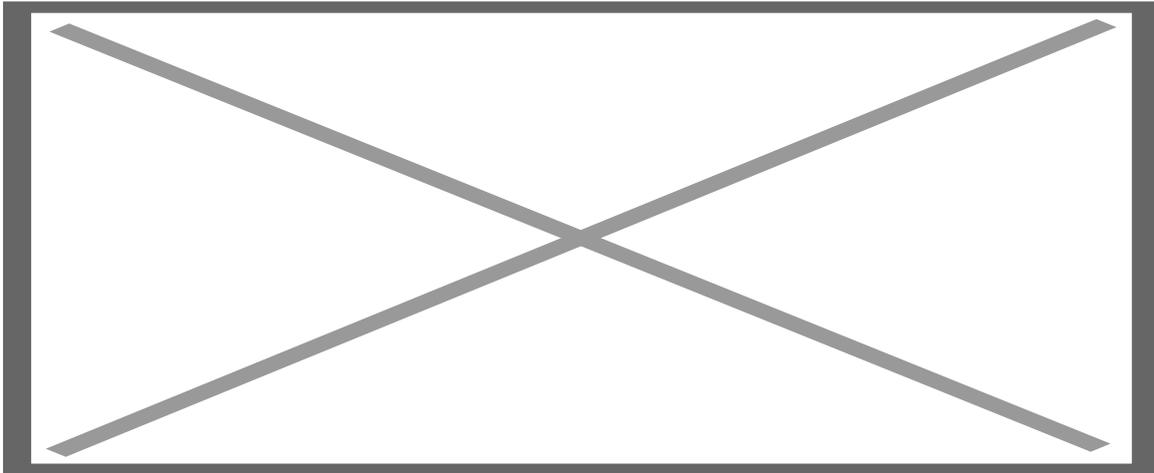
LEDs

RJ45?Left Green LED: Link/Act ; Right Yellow LED: GE Link
SFP+:Green LED= LINK/ACT state. SFP:Green LED= LINK/ACT state
2*Hardware PWR LED 6*User defined LED

*Product in roadmap

*SW features are provisional, pending for final product release.

Scenarios



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