



Enterprise Routing Portfolio for Borderless Networks

Delivering Service Consistency Across Branch and WAN Infrastructure

Cisco Integrated Services Routers Generation 2

Transforming the Next-Generation Branch-Office Experience—
Any Service, Any Branch, Anywhere



Feature	860	880	890	1941/1941-W	2901	2911	2921	2951	3925	3945
Form Factor	Desktop	Desktop	Desktop	Desktop (2 RU)	1 RU	2 RU	2 RU	2 RU	3 RU	3 RU
Integrated WAN Ports	10/100 Mbps FE	10/100 Mbps FE	1 GE, 1 FE	2 GE	2 GE	3 GE	3 GE (1 SFP)	3 GE (1 SFP)	3 GE (2 SFP)	3 GE (2 SFP)
Recommend WAN Access Speed (with services)	4 Mbps	8 Mbps	15 Mbps	25 Mbps	25 Mbps	35 Mbps	50 Mbps	75 Mbps	100 Mbps	150 Mbps
Modular Services Performance Engine (Field Upgradeable Motherboard)	No	No	No	No	No	No	No	No	Yes - SPE100	Yes - SPE150
Interface Slots (EHWIC)	0	0	0	2	4	4	4	4	4	4
Service Module Slots	0	0	0	0	0	1	1	2	2	4
ISM Slots	0	0	0	1**	1	1	1	1	1	1
PVDM Slots	0	1 (SRST models only)	0	0	2	2	3	3	4	4
USB Ports (v2.0)	0	1 (USB1)	2	2	2	2	2	2	2	2
Default/Max Flash	128 MB/128 MB	128 MB/128 MB or 256 MB/256 MB (SRST models only)	256 MB/256 MB	256 MB/4 GB	256 MB/4 GB	256 MB/4 GB	256 MB/4 GB	256 MB/4 GB	256 MB/4 GB	256 MB/4 GB
Default/Max DRAM (ECC DDR2)	256 MB/256 MB	256 MB/768 MB or 512 MB/768 MB (SRST models only)	512 MB/768 MB	512 MB/2.5 GB	512 MB/2.5 GB	512 MB/2.5 GB	512 MB/2.5 GB	512 MB/4 GB**	1 GB/4 GB***	1 GB/4 GB***
Redundant Power Supply	N/A	N/A	N/A	N/A	N/A	Yes, External RPS	Yes, External RPS	Yes, External RPS	Yes, Internal RPS	Yes, Internal RPS
Module Online Insertion and Removal (OIR)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes, SM OIR	Yes, SM OIR
Advanced Security	Enabled via Security License for Universal IOS Image, IPS and Content Filtering needs additional subscription licenses									
Stateful Firewall	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Onboard Hardware VPN Acceleration (DES, 3DES, AES)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VPN Services	Easy VPN Remote, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN)	Easy VPN Remote, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN)	Easy VPN Remote, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN)	Easy VPN Remote server, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), V3PN, MPLS VPN	Easy VPN Remote server, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), V3PN, MPLS VPN	Easy VPN Remote/server, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), V3PN, MPLS VPN	Easy VPN Remote/server, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), V3PN, MPLS VPN	Easy VPN Remote/server, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), V3PN, MPLS VPN	Easy VPN Remote/server, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), V3PN, MPLS VPN	Easy VPN Remote/server, Enhanced Easy VPN Remote, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), V3PN, MPLS VPN
SSL VPN	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Intrusion Prevention	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Content Filtering	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Network Foundation Protection	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2
Unified Communication	Enabled via Unified Communications License for Universal IOS Image, CCME/SRST support through separate feature licenses									
Local Conferencing	N/A	Yes	N/A	N/A	Yes, use PVDM3 or PVDM2	Yes, use PVDM3 or PVDM2	Yes, use PVDM3 or PVDM2	Yes, use PVDM3 or PVDM2	Yes, use PVDM3 or PVDM2	Yes, use PVDM3 or PVDM2
Digital Signal Processor Support	N/A	Yes on SRST models	N/A	N/A	PVDM3 and PVDM2	PVDM3 and PVDM2	PVDM3 and PVDM2	PVDM3 and PVDM2	PVDM3 and PVDM2	PVDM3 and PVDM2
Cisco Unified Survivable Remote Site Telephony Support	N/A	Up to 4 on SRST models	N/A	N/A	Up to 35	Up to 50	Up to 100	Up to 250	Up to 730	Up to 1200
Cisco Unified Communications Manager Express Support	N/A	N/A	N/A	N/A	Up to 35	Up to 50	Up to 100	Up to 150	Up to 250	Up to 350
Cisco Unity Express (NM, SM or ISM)	N/A	N/A	N/A	N/A	10 ports, 100 mailboxes	32 ports, 300 mailboxes	32 ports, 300 mailboxes	32 ports, 300 mailboxes	32 ports, 300 mailboxes	32 ports, 300 mailboxes
Cisco Unified Border Element (SIP/H.323 Sessions)	N/A	Up to 4	N/A	N/A	100	200	400	600	800	1000
Digital Voice and Video (T1/E1 channels)	N/A	N/A	N/A	N/A	Up to 100	Up to 150	Up to 240	Up to 400	Up to 480	Up to 720
Analog/BRI Voice	N/A	FXS 4, FXO 1, BRI 1 on SRST models	N/A	N/A	FXS 16, FXO 16, BRI 8	FXS 40, FXO 28, BRI 16	FXS 64, FXO 28, BRI 16	FXS 64, FXO 40, BRI 24	FXS 64, FXO 40, BRI 24	FXS 112, FXO 64, BRI 40
Routing and Multicast										
IPv4 Routing Protocols	RIP v1/v2	RIP v1/v2, EIGRP, OSPF, BGP, PBR	RIP v1/v2, EIGRP, OSPF, BGP, PBR	RIP v1/v2, EIGRP, OSPF, BGP, PBR	RIP v1/v2, EIGRP, OSPF, BGP, PBR, PIR	RIP v1/v2, EIGRP, OSPF, BGP, PBR, PIR	RIP v1/v2, EIGRP, OSPF, BGP, PBR, PIR	RIP v1/v2, EIGRP, OSPF, BGP, PBR, PIR	RIP v1/v2, EIGRP, OSPF, BGP, PBR, PIR	RIP v1/v2, EIGRP, OSPF, BGP, PBR, PIR
Multicast Routing Protocols	N/A	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD
IPv6 Routing Protocols	N/A	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR
Wireless LAN										
Integrated 802.11 b/g/n Access Point	Yes	Yes		Yes						
Integrated 802.11 a/b/g/n Access Point			Yes	Yes						
Unified and Autonomous Mode	Autonomous	Both	Both	Both						
RP-TNC Connectors for Field-replaceable	N/A	Yes (select models only)	Yes	Yes						
Optional High-gain Antennas										
Diversity (Dual Antennas)	Yes	Yes	Yes	Yes						
Wireless LAN Controller Module					6, 12, 25 80211 a/b/g/n AP controller	6, 12, 25 80211 a/b/g/n AP controller	6, 12, 25 80211 a/b/g/n AP controller	6, 12, 25 80211 a/b/g/n AP controller	6, 12, 25 80211 a/b/g/n AP controller	6, 12, 25 80211 a/b/g/n AP controller
Wireless WAN										
3G Cellular		Yes		HWIC	HWIC	HWIC	HWIC	HWIC	HWIC	HWIC
RP-TNC Connectors for Field-replaceable		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Optional High-gain Antennas										
Diversity (Dual Antennas)		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outdoor Antennas		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Integrated Switching										
Maximum Ethernet LAN Ports	4	2	8	9	18	42	68	68	92	116
Maximum Ethernet LAN Ports with PoE	0	2	4	8	16	40	64	64	88	112
PoE Support (Wattage) No PoE Boost				Yes, 80W	Yes, 130W	Yes, 200W	Yes, 280W	Yes, 370W	Yes, 520W	Yes, 520W
PoE Support (Wattage) with PoE Boost				No	No	Yes, 750W	Yes, 750W	Yes, 750W	Yes, 1040	Yes, 1040
EtherSwitch Service Module type (Width)						1 Single	1 Single or 1 Double	2 Single or 1 Double	(2 Single) or (1 Single + 1 Double)	(Up to 4 Single) or (Up to 2 Single + 1 Double)
Application/WAN Optimization										
Route Optimization				PIR	PIR	PIR	PIR	PIR	PIR	PIR
Network Contention Control				CoS, HQoS	CoS, HQoS	CoS, HQoS	CoS, HQoS	CoS, HQoS	CoS, HQoS	CoS, HQoS
Application/WAN Optimization					WAAS Module	WAAS Module	WAAS Module	WAAS Module	WAAS Module	WAAS Module
Application Services										
On-demand Application and Services Platform				SRE Module	SRE Module	SRE Module	SRE Module	SRE Module	SRE Module	SRE Module
Network Monitoring and Analysis				NAM Module	NAM Module	NAM Module	NAM Module	NAM Module	NAM Module	NAM Module
Third-party and Custom Applications				AXP Module	AXP Module	AXP Module	AXP Module	AXP Module	AXP Module	AXP Module
Storage System				ISS Module	ISS Module	ISS Module	ISS Module	ISS Module	ISS Module	ISS Module
Video Surveillance				VMSS and AVG Modules	VMSS and AVG Modules	VMSS and AVG Modules	VMSS and AVG Modules	VMSS and AVG Modules	VMSS and AVG Modules	VMSS and AVG Modules
Third-party Applications										
IP Address Management					Infoblox	Infoblox	Infoblox	Infoblox	Infoblox	Infoblox
Voice Recording				NICE (1941 only)	NICE	NICE	NICE	NICE	NICE	NICE
Fax over IP					Sagem-Interstar	Sagem-Interstar	Sagem-Interstar	Sagem-Interstar	Sagem-Interstar	Sagem-Interstar
Paging over IP					Singlewire	Singlewire	Singlewire	Singlewire	Singlewire	Singlewire
Public Health Integrator					Orion Health, Inc.	Orion Health, Inc.	Orion Health, Inc.	Orion Health, Inc.	Orion Health, Inc.	Orion Health, Inc.
Medical Data Exchange					Tiani-Spirit	Tiani-Spirit	Tiani-Spirit	Tiani-Spirit	Tiani-Spirit	Tiani-Spirit
SCPS Acceleration				Skipware	Skipware	Skipware	Skipware	Skipware	Skipware	Skipware

* Higher densities achieved through Enhanced EtherSwitch SMTs ** ISM slot is not available for use on 1941W *** ISM slot to 2 GB available for use, upgrade to 4 GB available in the future

Cisco ISR G2 Routers



Cisco 800 Series
860, 880, 890



Cisco 1900 Series
1941, 1941-W



Cisco 2900 Series
2901, 2911, 2921, 2951

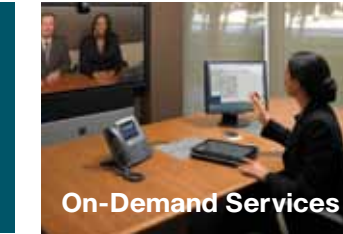


Cisco 3900 Series
3925, 3945

For more information on the Cisco ISR G2 routers, please visit www.cisco.com/go/isrg2.

Cisco ASR 1000 Series Aggregation Series Routers

Transforming and Extending the Enterprise WAN Edge



Feature	1002-F	1002	1004	1006
Form Factor	2 RU	2 RU	4 RU	6 RU
Chassis	Scalable to 2.5 Gbps	Scalable to 10 Gbps	Scalable to 40+ Gbps	Scalable to 40+ Gbps
Integrated WAN Ports	4 GE ports	4 GE ports	4 GE ports	4 GE ports
Embedded Services Processor (ESP)	Integrated 2.5-Gbps ESP	Yes - SPE100	Yes - SPE150	Yes - SPE150
Route Processor (RP)	Integrated Route Processor 1 with 4 GB memory	Integrated Route Processor 1 with 4 GB memory	ASR1000-ESP10 (single) or ASR1000-ESP10-N (single); Scalable to 10+ Gbps or ASR1000-ESP20 (single); Scalable to 20+ Gbps	ASR1000-ESP 10 (single) or ASR1000-ESP10-N (single); Scalable to 10+ Gbps or ASR1000-ESP20 (single); Scalable to 20+ Gbps
SPA Interface Processor (SIP)	Integrated	Integrated	2	3
Shared Port Adapter (SPA) Slots	1	3	8	12
Interface Support	FE, GE, 10GE, OC3 (POS/ATM), OC12 (POS/ATM), OC48 (POS), OC-192 (POS), channelized STM-1/OC3, (channelized+non-channelized) T3/DS0, T1/E1, Serial	FE, GE, 10GE, OC3 (POS/ATM), OC12 (POS/ATM), OC48 (POS), OC-192 (POS), channelized STM-1/OC3, (channelized+non-channelized) T3/DS0, T1/E1, Serial	FE, GE, 10GE, OC3 (POS/ATM), OC12 (POS/ATM), OC48 (POS), OC-192 (POS), channelized STM-1/OC3, (channelized+non-channelized) T3/DS0, T1/E1, Serial	FE, GE, 10GE, OC3 (POS/ATM), OC12 (POS/ATM), OC48 (POS), OC-192 (POS), channelized STM-1/OC3, (channelized+non-channelized) T3/DS0, T1/E1, Serial
Forwarding Rate	Up to 3 Mpps Up to 2.5 Gbps	Up to 14 Mpps Up to 5 or 10 Gbps depending on ESP	Up to 20 Mpps Up to 10 or 20 Gbps depending on ESP	Up to 20 Mpps Up to 10 or 20 Gbps depending on ESP
Minimum Cisco IOS Release	IOS XE 2.4.0	IOS XE 2.1.0	IOS XE 2.1.0	IOS XE 2.1.0
Default/Max Flash	128 MB/128 MB	128 MB/256 MB	256 MB/256 MB	256 MB/4 GB
System DRAM Memory	4 GB (default), 4 GB (max.)	4 GB (default), 4 GB (max.)	2 GB (default), 4 GB (max.)	2 GB (default), 4 GB (max.)
Redundant Power Supply	Yes, Dual AC or DC by default	Yes, Dual AC or DC by default	Yes, Dual AC or DC by default	Yes, Dual AC or DC by default
Advanced Security	Enabled instantly via Flexible Packet Inspection (FPI), IPsec and Firewall Licenses			
Zone-based Firewall and NAT services	Yes, up to 2.5 Gbps, VRF aware FW and VRF aware NAT	Yes, up to 10 Gbps, VRF aware FW and VRF aware NAT	Yes, up to 20 Gbps, VRF aware FW and VRF aware NAT	Yes, up to 20 Gbps, VRF aware FW and VRF aware NAT
VPN services	IPsec, GRE + IPsec, VTI, Easy VPN, Enhanced Easy VPN, Dynamic Multipoint VPN (DMVPN), 2547 over DMVPN, Group Encrypted Transport VPN (GET VPN), IPv6 IPsec SVTI	IPsec, GRE + IPsec, VTI, Easy VPN, Enhanced Easy VPN, Dynamic Multipoint VPN (DMVPN), 2547 over DMVPN, Group Encrypted Transport VPN (GET VPN), IPv6 IPsec SVTI	IPsec, GRE + IPsec, VTI, Easy VPN, Enhanced Easy VPN, Dynamic Multipoint VPN (DMVPN), 2547 over DMVPN, Group Encrypted Transport VPN (GET VPN), IPv6 IPsec SVTI	IPsec, GRE + IPsec, VTI, Easy VPN, Enhanced Easy VPN, Dynamic Multipoint VPN (DMVPN), 2547 over DMVPN, Group Encrypted Transport VPN (GET VPN), IPv6 IPsec SVTI
Onboard Hardware VPN Encryption (DES, 3DES, AES)	Yes, up to 1 Gbps	Yes, up to 4 Gbps	Yes, up to 7 Gbps	Yes, up to 7 Gbps
Maximum VPN tunnels	2000	4000	4000	4000
Network Based Application Intelligence (NBAR)	Yes, 90+ protocols	Yes, 90+ protocols	Yes, 90+ protocols	Yes, 90+ protocols
Flexible Packet Matching (FPM)	Yes	Yes	Yes	Yes
Netflow Event Logging— For Firewall and NAT services	Yes	Yes	Yes	Yes
Network Foundation Protection	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2	ACL, Control Plane Policing (CoPP), CoS, Role-based CLI Access, Source-based RTBH, uRPF, SSHv2
Unified Communication	Enabled instantly via CUBE License			
Cisco Unified Border Element (Enterprise Edition)—SIP Trunking (Managed)	Yes	Yes	Yes	Yes
Cisco Unified Border Element (SP Edition)—SIP Trunking (SP hosted)	Yes	Yes	Yes	Yes
cRTP	Yes	Yes	Yes	Yes
WebEx Node	No	Yes	Yes	Yes
B2B TelePresence Enablement	Yes	Yes	Yes	Yes
Routing and Multicast				
IPv4 Routing Protocols	RIP v1/v2, EIGRP, OSPF, BGP, PBR	RIP v1/v2, EIGRP, OSPF, BGP, PBR	RIP v1/v2, EIGRP, OSPF, BGP, PBR	RIP v1/v2, EIGRP, OSPF, BGP, PBR
Multicast Routing Protocols	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD	PIM-SM, mroute (static route), and MLD
IPv6 Routing Protocols	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR	EIGRP, RIP, OSPFv3, IS-IS, and PBR
Netflow v5/v9	Yes	Yes	Yes	Yes
High Availability				
In Service Software Upgrade (ISSU)	Yes	Yes	Yes	Yes
Software Redundancy (dual IOS on same Route Processor)	Yes	Yes	Yes	N/A
NSF/SSO	Yes	Yes	Yes	Yes
Quality of				