



# CISCO INTEGRATED SERVICE ROUTERS – 1800/2800/3800 SERIES AT-A-GLANCE

Inside Sales Systems Engineering

## COMPARATIVE OVERVIEW

Model	Memory (Std/Max) MBytes	LAN	WIC Slots	NM Slots	AIM Slots	DSP Slots	USB Ports	In-Line Power (Ports)	Form Factor	PS Redundancy	Voice Support	CUE Support <sup>3</sup>	Max CCME Phones <sup>4</sup>	Max SRST Phones <sup>4</sup>
1711/1712 <sup>5</sup>	F: 32/32 D: 64/128	5 E/FE	No	No	No	No	No	No	Desk	No	No	No	No	No
1721 <sup>6</sup>	F: 32/32 D: 64/128	1 E/FE	2 VWIC/WIC (data only)	No	No	No	No	No	Desk	No	No	No	No	N
1751 <sup>6</sup>	F: 32/32 D: 64/128	1 E/FE	2 VWIC/WIC/VIC 1 VWIC/VIC (voice only)	No	No	2	No	No	Desk	No	DSP	No	24	24
1841	F: 32/128 D: 128/384	2 E/FE	2 HWIC/VVIC/WIC (data only)	No	1	No	1	No	Desk	No	No	No	No	No
1760 <sup>6</sup>	F: 32/64 D: 64/128	1 E/FE	2 VWIC/WIC/VIC 2 VWIC/VIC (voice only)	No	No	2	No	No	1U	No	DSP	No	24	24
2801	F: 64/128 D: 128/384	2 E/FE	2 HWIC/VVIC/WIC/VIC 1 VWIC/WIC/VIC (voice/data) 1 VWIC/VIC (voice only)	No	2	2	1	120W (16)	1U	No	DSP	AIM	24	24
2611XM	F: 32/48 D: 128/256	2 E/FE	2 VWIC/WIC (data only)	1 NM	1	No	No	No	1U	RPS-600 Conn. Opt.	AIM/ NM	AIM/ NM	36	36
2811	F: 64/256 D: 256/768	2 E/FE	4 HWIC/VVIC/WIC/VIC	1 NME	2	2	2	160W (24)	1U	RPS-675 Conn. Std.	DSP/ NM	AIM/ NM	36	36
2621XM	F: 32/48 D: 128/256	2 E/FE	2 VWIC/WIC (data only)	1 NM	1	No	No	No	1U	RPS-600 Conn. Opt.	AIM/ NM	AIM/ NM	36	36
2821	F: 64/256 D: 256/1GB	2 E/FE/GE	4 HWIC/VVIC/WIC/VIC	1 NME-X 1 EVM-HD	2	3	2	240W (24)	2U	RPS-675 Conn. Std.	DSP/ NM	AIM/ NM	48	48
2651XM	F: 32/48 D: 256/256	2 E/FE	2 VWIC/WIC (data only)	1 NM	1	No	No	No	1U	RPS-600 Conn. Opt.	AIM/ NM	AIM/ NM	48	48
2691	F: 32/128 D: 256/256	2 E/FE	3 VWIC/WIC (data only)	1 NM	2	No	No	No	2U	RPS-600 Conn. Opt.	AIM/ NM	AIM/ NM	72	72
2851	F: 64/256 D: 256/1GB	2 E/FE/GE	4 HWIC/VVIC/WIC/VIC	1 NME-XD 1 EVM-HD	2	3	2	360W (44)	2U	RPS-675 Conn. Std.	DSP/ NM	AIM/ NM	96	96
3725	F: 32/128 D: 256/256	2 E/FE	3 VWIC/WIC (data only)	2 NM One NM can be used for a NMD	2	No	No	360W (52)	2U	RPS-600 Conn. Opt.	AIM/ NM	AIM/ NM	144	144
3825	F: 64/256 D: 256/1GB	2 E/FE/GE 1 SFP <sup>7</sup>	4 HWIC/VVIC/WIC/VIC	2 NME-X/EVM-HD <sup>8</sup> One NME-X can be used for a NME-XD	2	4	2	360W (52)	2U	RPS-675 Conn. Std.	DSP/ NM	AIM/ NM	168	336
3745	F: 32/128 D: 256/256	2 E/FE	3 VWIC/WIC (data only)	4 NM Can be combined horiz. into up to 2 NMD	2	No	No	360W (72)	2U	Internal Red. PS Option	AIM/ NM	AIM/ NM	192	480
3845	F: 64/256 D: 256/1GB	2 E/FE/GE 1 SFP <sup>7</sup>	4 HWIC/VVIC/WIC/VIC	4 NME-X/EVM-HD <sup>9</sup> Can be combined horiz. into up to 2 NME-XD	2	4	2	360W (72)	3U	Internal Red. PS Option	DSP/ NM	AIM/ NM	240	720

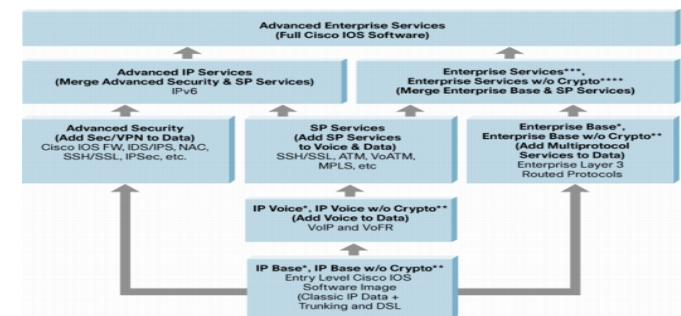
### Notes:

- Performance numbers will vary depending on packet size and features. Please contact your account team for more precise performance figures.
- Crypto numbers depend heavily on traffic type, packet size and number of tunnels. Please contact your account team for more precise performance figures.
- 50 VM boxes (up to 14 hours storage) using Cisco Unity Express AIM, 100 VM boxes (up to 100 hours storage) using Cisco Unity Express network module (NM -CUE). The NM-CUE-EC can be used for up to 300 hours of storage and up to 250 mailboxes.
- Phone density numbers indicated are for CCME/SRST 4.0 (available in 12.4T).
- 1711/12 are NOT modular routers. They are there for the sake of comparison but they should not be considered in the same modularity/performance/feature category as the ISRs.
- Always remember that on the 1721/1751/1760, a WIC is likely to be needed and hence, added to the price of the solution if connecting to a WAN, even if all is required is an extra Ethernet port for a broadband connection.

## TOP 12 REASONS FOR CHOOSING THE CISCO ISRS

- The ISRs are more cost effective than their legacy equivalents, particularly when the network requirements map to an existing bundle.
- The ISRs are faster (up to five times) and can handle quite a bit more memory than the legacy platforms. The base configurations also have more memory.
- The ISRs are designed with the ability to run multiple concurrent services (FW, NAT, IDS, QoS, etc.) at wire-speed.
- All the ISRs have TWO built-in LAN connections - FE or GE.
- All the ISRs have an embedded HW VPN accelerator - It is always included, it is just a matter of buying a VPN enabled image to turn it on. If that is not fast enough, a VPN AIM can be added to further enhance VPN performance.
- The HWIC enabled slots provide an impressive 400Mbps of dedicated bandwidth (the old WICs provided up to 8Mbps). This is great news for LAN uplinks and Ethernet Switch HWICs. The NME slots offer up to 1.2Gbps per module (the standard NM was only 600Mbps).
- The EVM slot offers high density digital/analog voice ports.
- All the ISRs with voice support have on-board DSP slots. There is no need to use a NM slot for a network module with DSPs for voice applications anymore - the on-board DSP slots can provide enough DSP resources for most common requirements.
- All the ISRs with voice support can provide voice mail functionality with CUE (AIM and/or NM). CUE was not supported on the 1700 family.
- All the ISRs that support voice can provide in-line power to Ethernet switch ports via a HWIC-ESW-POE or a NM-ESW-PWR (optional AC-IP power supply is required for in-line power).
- Most ISRs provide some option for power supply redundancy. The 2811, 2821, 2851 and 3825 have a RPS connector and the 3845 can take a built-in redundant power supply.
- For investment protection, the ISRs support most of the existing WICs, VICs, VWICs and NM modules (check the datasheets for details).
- SDM (Security Device Manager), included on all ISRs <http://www.cisco.com/en/US/products/sw/secursw/ps5318/index.html>

## 12.4 IOS Packaging (IP Base includes BGP, OSPF)



Note: Differences with 12.3 (below) apply to: 1700, 1841, 2600XM, 2691, 2800, 3700, 3800  
Some features/feature sets may not apply to all families. Please refer to the Cisco IOS Feature Navigator: <http://www.cisco.com/go/fin>

\* New images as of 12.4: homonymic 12.3 images plus SSH/SSL/SNMPv3 for secure management (K9 indicator in image/part number)

\*\* Same feature set as corresponding 12.3 IPB/IPVEB images, now renamed to reflect the missing secure management support

\*\*\* This image simply gets the standard K9 indicator in image/part number

\*\*\*\* New image as of 12.4: Enterprise Services without SSH/SSL/SNMPv3 secure management

## 1800/2800/3800 Modules Overview

### WIC Slots: WAN Interface Card (data only)

- Current architecture and physical characteristics on existing 1600/1700/2600/3600/3700 to support WIC modules (ex.: WIC-1T).
- A WIC slot cannot provide in-line power or PoE (802.3af) to a WIC card.
- A total of 8Mbps of bandwidth is shared between all WIC slots present in a chassis.

### VIC Slots: Voice Interface Card (voice only)

- Current architecture and physical characteristics on existing 1700/2600/3600/3700 to support VIC modules (ex.: VIC2-2FXO).

### VVIC Slots: Voice/WAN Interface Card (voice and/or data)

- Current architecture and physical characteristics on existing 1700/2600/3600/3700 to support VVIC modules. (ex.: VVIC-1MFT-T1).
- On the 2600/3600/3700, the WIC/VVIC slots can use the AIM-VOICE for as a DSP resource digital voice capability.

### HWIC Slots: High Speed WAN Interface Card

- The HWIC slot has the same physical form-factor as the existing VIC/WIC/VVIC slots and is backward compatible to support most of the more than 30 existing WICs, VVICs<sup>1</sup> and VICs<sup>2</sup>.
- The HWIC offer greater speeds and higher port density than the current WIC card. Up to 400Mbps (full duplex) of dedicated bandwidth is available for each HWIC slot.
- HWIC slots can use built-in DSP (PVDM) resources for voice applications.
- HWIC slots supports Cisco product-based in-line power and PoE(802.3af)<sup>3</sup>.
- HWIC slots do not support online insertion and removal (OIR).
  - VVICs are supported in data-only mode on the Cisco 1841.
  - VICs are not supported on the CISCO 1841 (no voice support on that platform).
  - Power is not supported on the HWIC slots on the Cisco 1841.

### HWIC-D Slots: High Speed WAN Interface Card Double-wide

- An HWIC-D slot is created when two HWIC slots are combined into one wider slot by removing the center rail between two side-by-side individual WIC slots.
- Note that the way the WIC slots are laid out on an 1841, it is not possible to combine them in a HWIC-D configuration. But the 2800/3800 all support that configuration; their (4) HWIC slots becoming (2) HWIC-D slots.

### NM Slots: Network Module

- Current architecture and physical characteristics on existing 2600/3600/3700 NM module (ex.: NM-1HSSI).
- A chassis supports a maximum of 600Mbps BW that is shared between all the NM slots.
- NM slots supports Cisco product-based in-line power but not PoE/802.3af.

### NME Slots: Network Module Enhanced

- The NME slot have the same physical form factor as the current NM module slot.
- The NME slot is backward compatible to support most NM modules.
- The NME slot offers greater speed and higher port density than the current NM. A total of 1.2Gbps of maximum BW is shared between all the NME slots in a chassis.
- The NME slots support both Cisco based in-line power and PoE/802.3af.
- OIR of modules in the NME slot is supported on Cisco 3800 Series routers. OIR is used for replacement of like modules only, and limitations apply per module (check the documentation for more details).

### NMD Slots: Network Module Double-wide

- Current architecture and physical characteristics of existing 3700 NMs Double-wide (ex.: NMD-36ESW).
- A NMD slot is created by removing the separator between two NM slots adjacent to each other.

### NME-X Slots: Network Module Enhanced eXtra-wide

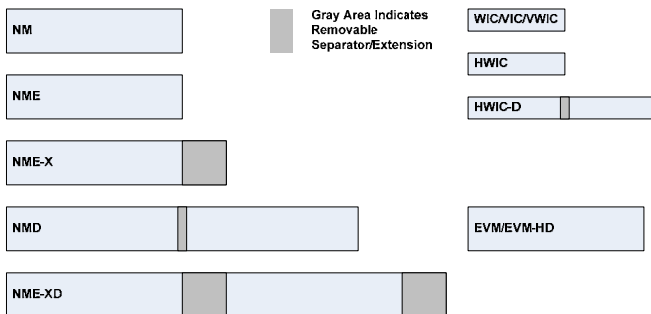
- The NME-X is a wider form of the NME that will enable future services and functions.
- NME-X slot is backward compatible to support the NME and NM modules.

### NME-XD Slots: Network Module Enhanced eXtra-Double-wide

- Created when two NME-X slots are combined into one bigger slot by removing the center rail between two side-by-side-individual slots.

### EVM Slots: Extension Voice Module

- Although there is mention of it in the documentation, there is no evi-



dence that a pure EVM (non-HD) module will ever exist.

### EVM-HD Slots: Extension Voice Module - High-Density

- The EVM-HD has the same form factor as a regular NM<sup>1</sup>.
- EVM-HD offers additional voice services and higher density for in a module format.
- EVM-HD slot can take advantage of the PVDMs on the motherboard to provide service to voice interfaces.
  - The dedicated EVM slots on the 2821 and 2851 cannot accept NM/NME modules. On the 3825, 1 EVM module is allowed in either of the 2 NME slots. On the 3845, 2 EVM modules are allowed in either of the 4 NME slots.
  - VVICs are supported in data-only mode on the Cisco 1841.

### AIM Slots: Advanced Integration Module

- Current architecture and physical characteristics on existing 2600/3660/3700 to support AIM modules (ex.: AIM-VPN/BPII-PLUS).

### USB Ports

- Can be used for USB Flash (Cisco Branded only) and an optional USB token for secure configuration distribution and off-platform storage of VPN credentials.
- USB eTokens for secure configurations are available [http://www.cisco.com/en/US/products/ps6247/products\\_data\\_sheet0900aecd80232473.html](http://www.cisco.com/en/US/products/ps6247/products_data_sheet0900aecd80232473.html)
- Cannot be used as a console and/or auxiliary port.

### AC-IP: In-line power enabled power supply

- Optional AC power supply with support for in-line power distribution. It is required to provide PoE (802.3af) an/or Cisco pre-standard in-line power<sup>1</sup> to NM and HWIC slots.
  - PoE/802.3af support depends on module implementation.

## MARKETING TIDBITS

- IOS default Image for the ISRs is now 12.4 and 12.4T
- The ISRs are advantageously competing with other vendors' offerings. For example, the ISRs support more security features, more IP services (QoS, NAT, etc.), more voice features, and have more connectivity options.
- There is a new Linksys to Cisco trade-up program that can be used for the ISRs.
- Like with other Cisco equipment purchases, the Cisco Technology Migration Program (TMP) can be used to migrate from legacy platforms to ISRs.
- ISR performance with concurrent services

1841: 1 T1/E1  
 2801: 1 T1/E1  
 2811: 2 T1/E1  
 2821: 4 T1/E1  
 2851: 6 T1/E1  
 3825: 14 T1/E1  
 3845: 1 T3/E3

### Competitive Information (Hwawei, 3Com, Juniper, Nortel)

[http://www.cisco.com/web/partners/downloads/partner/WWWchannels/technology/routing/routing\\_competitive\\_refguide.pdf](http://www.cisco.com/web/partners/downloads/partner/WWWchannels/technology/routing/routing_competitive_refguide.pdf)

### USEFUL LINKS

Public CCO Website (ISR) <http://www.cisco.com/go/isr>  
 Public CCO Website (1800) <http://www.cisco.com/go/1800>  
 Public CCO Website (2800) <http://www.cisco.com/go/2800>  
 Public CCO Website (3800) <http://www.cisco.com/go/3800>

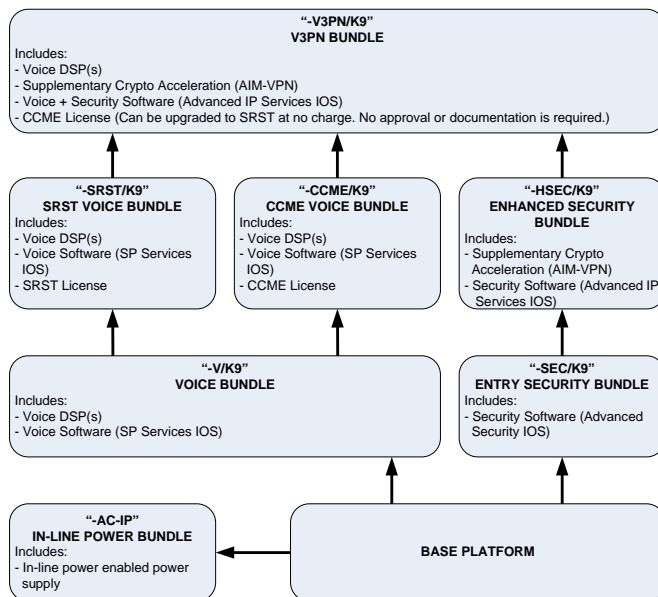
## IMPORTANT TECHNICAL CONSIDERATIONS

- The ISRs are marketed as a wire-speed (WAN speed) integrated service routers but they are not to be positioned as L3 switches or LAN routers. The positioning for wire-speed services is as follows: 1841-1xT1/E1/xDSL, 2801-1xT1/E1/xDSL, 2811-2xT1/E1/xDSL, 2821-4xT1/E1/xDSL, 2851-6xT1/E1/xDSL, 3825 ½xT3/E3, 3845-1xT3/E3.
- On power redundancy - 1841 and 2801 have NO RPS capability. The 2811/2821/ 2851/3825 have an integrated RPS connector (for RPS-675). The 3845 can take a redundant internal PS.
- Not all existing WICs, VVICs, VICs, NMs, and AIMS are supported on the new platforms. Make sure you verify to prevent compatibility issues. Notably incompatible modules are the WIC-IDSU-T1 (use WIC-1DSU-T1-V2), WIC-1ENET (from the 1700 family), NM-1V and NM-2V (EOS) and the AIM-VOICE-30 and AIM-ATM-VOICE-30. (check the documentation and release notes for more details).
- If you use an AIM card to further enhance the crypto performance, the internal crypto module will be disabled.
- An AC-IP Power Supply is required to provide in-line power to an ESW module inserted in a NM and/or HWIC slots.
- At this time, only the HWIC-4ESW-POE and HWIC-D-9ESW-POE support 802.3af (IEEE standard PoE) compliant in-line power. The old NM-16ESW-PWR and NMD-36ESW-PWR do not support 802.3af due to design limitations.
- A maximum of TWO ESW modules supported in a chassis. It is recommended to stack the two modules for VLAN database consistency.
- On the HWIC-D-9ESW-POE, all 9 ports can be used as switch ports but only 8 ports can provide in-line power concurrently.
- On the ISRs, DES, 3DES and AES256 performance numbers are the same.

## ISR BUNDLES EXPLAINED

### Notes:

- "/K9" in the part number of a bundle doesn't necessarily mean that security/VPN is included in that bundle. It is just an indication that this SW image has some crypto feature that is subject to export control. So, for example, "CISCO2801-V/K9" is a voice bundle and doesn't have anything to do with VPNs but, because it has SSH (Secure Encrypted Shell) for management purposes, it received the "/K9" appellation.



## Enhancements to ISR HSEC Bundles from January 10th 2007

For sales orders placed from January 10<sup>th</sup> 2007, all HSEC bundles for Integrated Services Routers (Cisco 1800, 2800, 3800 Series routers) will be enhanced with the following changes:-

- Includes [new AIM-VPN/SSL-x card](#) (in lieu of AIM-VPN/xxII-PLUS card)
- Upgrades Cisco IOS image from 12.4(3) Mainline to 12.4(9)T
- Includes 10 to 25 end-user licenses for SSL VPN (at no additional cost)
- Upgrades memory (both DRAM and CF) **ONLY** for 3800 Series ISR HSEC Bundles

Below are details of the hardware and software changes (in bold) to the HSEC bundles -

SKUs	Existing Bundle Hardware			New Bundle Hardware		
	AIM-VPN	Memory (DRAM)	Flash (CF)	AIM-VPN	Memory (DRAM)	Flash (CF)
CISCO1841-HSEC/K9	AIM-VPN/BPII-PLUS	256 MB	64 MB	AIM-VPN/SSL-1	256 MB	64 MB
CISCO2801-HSEC/K9	AIM-VPN/EPII-PLUS	256 MB	64 MB	AIM-VPN/SSL-2	256 MB	64 MB
CISCO2811-HSEC/K9	AIM-VPN/EPII-PLUS	256 MB	64 MB	AIM-VPN/SSL-2	256 MB	64 MB
CISCO2821-HSEC/K9	AIM-VPN/EPII-PLUS	256 MB	64 MB	AIM-VPN/SSL-2	256 MB	64 MB
CISCO2851-HSEC/K9	AIM-VPN/EPII-PLUS	256 MB	64 MB	AIM-VPN/SSL-2	256 MB	64 MB
CISCO3825-HSEC/K9	AIM-VPN/EPII-PLUS	256 MB	64 MB	AIM-VPN/SSL-3	512 MB	128 MB
CISCO3845-HSEC/K9	AIM-VPN/HPPII-PLUS	256 MB	64 MB	AIM-VPN/SSL-3	512 MB	128 MB

SKUs	Existing Bundle Software			New Bundle Software		
	IOS Image	IOS Release	SSL VPN license	IOS Image	IOS Release	SSL VPN license
CISCO1841-HSEC/K9	Adv. IP Services	12.4(3) M	-	Adv. IP Services	12.4(9)T	FL-WEBVPN-10-K9
CISCO2801-HSEC/K9	Adv. IP Services	12.4(3) M	-	Adv. IP Services	12.4(9)T	FL-WEBVPN-10-K9
CISCO2811-HSEC/K9	Adv. IP Services	12.4(3) M	-	Adv. IP Services	12.4(9)T	FL-WEBVPN-10-K9
CISCO2821-HSEC/K9	Adv. IP Services	12.4(3) M	-	Adv. IP Services	12.4(9)T	FL-WEBVPN-10-K9
CISCO2851-HSEC/K9	Adv. IP Services	12.4(3) M	-	Adv. IP Services	12.4(9)T	FL-WEBVPN-10-K9
CISCO3825-HSEC/K9	Adv. IP Services	12.4(3) M	-	Adv. IP Services	12.4(9)T	FL-WEBVPN-25-K9
CISCO3845-HSEC/K9	Adv. IP Services	12.4(3) M	-	Adv. IP Services	12.4(9)T	FL-WEBVPN-25-K9

### Important Announcements:

- 1) BGP and OSPF in the IP Base feature set for the ISR 2800/3800 series in 12.4(11)T

## VSEC Bundles

	2800		3800	
	Included	Router	Included	Router
V S E C	C2801-VSEC/K9 \$3695	Router	C3825-VSEC/K9 \$11,995	Router
	C2811-VSEC/K9 \$4195	Advanced IP Services IOS	C3845-VSEC/K9 \$15,495	Advanced IP Services IOS
	C2821-VSEC/K9 \$5695	DSP		DSP
	C2851-VSEC/K9 \$8395	64MB Flash / 256MB Dram		128MB Flash / 512MB Dram
			36 User CME Feature License**	
V S E C - C C M E	C2801-VSEC-CCME/K9 \$4095	Router	C3825-VSEC-CCME/K9 \$13,795	Router
	C2811-VSEC-CCME/K9 \$4695	Advanced IP Services IOS	C3845-VSEC-CCME/K9 \$17,795	Advanced IP Services IOS
	C2821-VSEC-CCME/K9 \$6395	DSP		DSP
	C2851-VSEC-CCME/K9 \$9595	64MB Flash / 256MB Dram		128MB Flash / 512MB Dram
		CCME License		168 Seat CME License (3825)
			240 Seat CME License (3845)	
V S E C - S R S T	C2801-VSEC-SRST/K9 \$4095	Router	C3825-VSEC-SRST/K9 \$13,795	Router
	C2811-VSEC-SRST/K9 \$4695	Advanced IP Services IOS	C3845-VSEC-SRST/K9 \$17,795	Advanced IP Services IOS
	C2821-VSEC-SRST/K9 \$6395	DSP		DSP
	C2851-VSEC-SRST/K9 \$9595	64MB Flash / 256MB Dram		128MB Flash / 512MB Dram
		SRST License		168 Seat SRST License (3825)
			240 Seat SRST License (3845)	

### New Network Modules/HWIC Supported

- 1) NM-1VSAT-GILAT IP VSAT Satellite WAN Module
- 2) TBD 3G Cellular Wireless HWIC
- 3) HWIC-CABLE-D-2 1 port DOCSIS 2.0 qualified cable HWIC
- 4) NME-WAE
- 5) HWIC-2SHDSL
- 6) HWIC-4SHDSL
- 7) HWIC-1ASDL
- 8) HWIC-1FE, HWIC-2FE

### Service Modules

- 1) Cisco Wide Area Application Services (WAAS) Network Modules
- 2) NM-AIR-WLC6-K9 Wireless LAN Controller Module
- 3) Cisco 2800/3700/3800 Series AON Enhanced Network Module
- 4) Cisco Network Analysis Module
- 5) Cisco Content Engine Network Modules
- 6) Cisco Content Engine Network Modules for Security
- 7) Cisco IDS Network Module
- 8) Cisco Unity Express Voice-Mail Network Modules
- 9) The new Cisco EtherSwitch service modules NME-16ES-1G-P, NME-X-23ES-1G-P, NME-XD-24ES-1S-P, and NME-XD-48ES-2S-P run CATOS and have exact feature parity with the C3750

[http://www.cisco.com/en/US/products/ps5855/products\\_data\\_sheet0900aecd8028d15f.html](http://www.cisco.com/en/US/products/ps5855/products_data_sheet0900aecd8028d15f.html)



# CISCO INTEGRATED SERVICE ROUTERS — 850/870/1801,2,3,11,12 SERIES AT-A-

## Comparative Overview

Model	Memory (Std/Max) MBytes	LAN	WAN Port	4/8 port Managed Switch	Integrated ISDN Dial Backup	V.92 Analog Modem Dial Backup	USB Ports	802.11 Wireless Model	Aux and console Ports	PoE	Diversity Antennas	Dual Mode Antennas	Replaceable Antennas	No. of Broadcast SSIDs /VLANs
1801	F: 32/128 D: 128/384	1 E/FE	ADSL over POTS	8	Yes	No	0	802.11 a/b/g	Yes	Optional	Yes	Yes Simultaneous a/b/g	Yes	8 SSID/8 VLANs
1802	F: 32/128 D: 128/384	1 E/FE	ADSL over ISDN	8	Yes	No	0	802.11 a/b/g	Yes	Optional	Yes	Yes Simultaneous a/b/g	Yes	8 SSID/8 VLANs
1803	F: 32/128 D: 128/384	1 E/FE	G.SHDSL (4 wire)	8	Yes	No	0	802.11 a/b/g	Yes	Optional	Yes	Yes Simultaneous a/b/g	Yes	8 SSID/8 VLANs
1811	F: 32/128 D: 128/384	2 E/FE	No	8	No	Yes	2	802.11 a/b/g	Yes	Optional	Yes	Yes Simultaneous a/b/g	Yes	8 SSID/8 VLANs
1812	F: 32/128 D: 128/384	2 E/FE	No	8	Yes	No	2	802.11 a/b/g	Yes	Optional	Yes	Yes Simultaneous a/b/g	Yes	8 SSID/8 VLANs
871	F: 24/52 D: 128/256	1 FE	No	4	No	Yes	2	802.11 b/g	Yes (Virtual Aux Port)	Optional (external adapter)	Yes	No	Yes	4 SSID/3 VLANs
877	F: 24/52 D: 128/256	No	ADSL over POTS	4	No	Yes	No	802.11 b/g	Yes (Virtual Aux Port)	Optional (external adapter)	Yes	No	Yes	4 SSID/3 VLANs
876	F: 24/52 D: 128/256	No	ADSL over ISDN	4	Yes	Yes	No	802.11 b/g	Yes (Virtual Aux Port)	Optional (external adapter)	Yes	No	Yes	4 SSID/3 VLANs
878	F: 24/52 D: 128/256	No	G.SHDSL (4 wire)	4	No	Yes	No	802.11 b/g	Yes (Virtual Aux Port)	Optional (external adapter)	Yes	No	Yes	4 SSID/3 VLANs
851	F: 24/24 D: 64/64	1 E	No	4	No	No	No	802.11 b/g	Yes (Virtual Aux Port)	No	No (Single Antenna)	No	No	1 SSID
857	F: 24/24 D: 64/64	No	ADSL over POTS	4	No	No	No	802.11 b/g	Yes (Virtual Aux Port)	No	No (Single Antenna)	No	No	1 SSID

### Security Features

- 1) Cisco IOS FW for 1800 (Fixed), 870s, and 850s
- 2) HW VPN Acceleration for 1800s, 870s, 850s
- 3) Advance VPN features (DMVPN, EasyVPN, Remote Access) only for the 1800s and 870s
- 4) Cisco IPS 1800s, and 870s
- 5) NAC 1800s and 870s
- 6) 802.1x 1800s, 870s, 850s
- 7) One of the switch ports on the 870s can be designated as the DMZ port

### Wireless Security Features

- 1) PEAP, 802.1x, LEAP, static and dynamic WEP, TKIP/SSN, MAC authentication/filter, user database for survivable local authentication, RADIUS accounting
- 2) PSK, WPA, WPA2/802.11i (software upgradeable in future software release), EAP-FAST (future) on all Platforms