



# CHAPTER 1

## Product Overview

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This chapter provides an overview of the features available for the Cisco 860, Cisco 880, and Cisco 890 series Integrated Services Routers (ISRs), and contains the following sections:

- [General Description, page 1-1](#)
- [Cisco 860 Series ISRs, page 1-1](#)
- [Cisco 880 Series ISRs, page 1-2](#)
- [Cisco 890 Series ISRs, page 1-4](#)
- [Licensing, page 1-5](#)

## General Description

The Cisco 860, Cisco 880, and Cisco 890 series ISRs provide Internet, VPN, voice, data, and backup capability to corporate teleworkers and remote and small offices of fewer than 20 users. These routers are capable of bridging and multiprotocol routing between LAN and WAN ports, and provide advanced features such as antivirus protection. In addition, the Cisco 860W, Cisco 880W, and Cisco 890W series ISRs incorporate an 802.11n wireless LAN option that allows the ISR to act as a wireless access point.

## Cisco 860 Series ISRs

The Cisco 860 series ISRs are fixed-configuration data routers that provide either a 10/100 Fast Ethernet (FE) or an ADSL2 over POTS WAN connection. The following features are supported on all models:

- [4-port 10/100 FE LAN Switch, page 1-1](#)
- [Security Features, page 1-2](#)
- [802.11n Wireless LAN Option, page 1-2](#)

## 4-port 10/100 FE LAN Switch

This switch provides four ports for connecting to 10/100BASE-T (10/100 Mbps) Fast Ethernet (FE) LANs or access points.

## Security Features

The Cisco 860 platforms provide the following security features:

- IPsec
- Firewall

## 802.11n Wireless LAN Option

The Cisco 861W ISR has an integrated 802.11b/g/n single radio module for wireless LAN connectivity. With this module, the router can then act as an access point in the local infrastructure.

## Cisco 880 Series ISRs

The Cisco 880 series ISRs are a family of fixed-configuration data and voice routers as described in the following sections:

- [Models of the Cisco 880 Series ISRs, page 1-2](#)
- [Common Features, page 1-3](#)
- [Voice Features, page 1-4](#)

## Models of the Cisco 880 Series ISRs

The Cisco 880 series ISRs have data and voice capabilities. Each router has one WAN port. In addition, the voice routers have either FXS or BRI voice ports. Data or voice backup ports are also available on most of the routers. The Cisco 880G routers come with a commercial third-generation (3G) wireless interface card that provides cellular backup. 802.11b/g/n option is available on all models.

[Table 1-1](#) gives the port configurations of the Cisco 880 series data routers.

**Table 1-1 Port Configurations of the Cisco 880 Series Data ISRs**

Model	WAN Port	Backup	
		Data ISDN	Data 3G
881 and 881W	FE	—	—
881G and 881GW	FE	—	x
886 and 886W	ADSL2oPOTS	x	—
886G and 886GW	ADSL2oPOTS	—	x
887 and 887W	ADSL2oPOTS	x	—
887G and 887GW	ADSL2oPOTS	—	x
887V and 887VW	VDSL2oPOTS	x	—
887VG and 887VGW	VDSL2oPOTS	—	x
888 and 888W	G.SHDSL	x	—
888G and 888GW	G.SHDSL	—	x

Table 1-2 gives the port configurations of the Cisco 880 series voice routers.

**Table 1-2 Port Configurations of the Cisco 880 Series Voice ISRs**

Model	WAN Port	FXS Voice Ports	Backup	
			PSTN FXO	PSTN BRI
C881SRST and C881SRSTW	FE	4	x	—
C888SRST and C888SRSTW	G.SHDSL	4	—	x

## Common Features

Cisco 880 series ISRs support the following features:

- [4-port 10/100 FE LAN Switch, page 1-3](#)
- [802.11n Wireless LAN Option, page 1-3](#)
- [Real-Time Clock, page 1-3](#)
- [Security Features, page 1-3](#)

### 4-port 10/100 FE LAN Switch

This switch provides four ports for connecting to 10/100BASE-T FE LANs, access points, or IP phones. In addition, an upgrade is available that gives Power over Ethernet (PoE) on two of the ports to provide power to access points or phones.

### 802.11n Wireless LAN Option

The Cisco 880W series ISRs have an integrated 802.11b/g/n single radio module for wireless LAN connectivity. With this module, the router can act as an access point in the local infrastructure.

### Real-Time Clock

A real-time clock (RTC) provides date and time when the system is powered on. The RTC is used to verify the validity of the Certification Authority stored on the router.

## Security Features

The Cisco 880 platforms provide the following security features:

- Intrusion Prevention System (IPS)
- Dynamic Multipoint VPN (DMVPN)
- IPsec
- Quality of service (QoS)
- Firewall
- URL filtering

## Voice Features

The Cisco 880 voice platforms (C880SRST and C880SRSTW) support the following voice features:

- Signaling protocols: Session Initiation Protocol (SIP), Media Gateway Control Protocol (MGCP), and H323
- Real-time transfer protocol (RTP), Cisco RTP (cRTP), and secure RTP (SRTP) for these signaling protocols
- Fax passthrough, Cisco fax relay, T37 fax store-and-forward, and T.38 fax relay (including T.38 gateway-controlled MGCP fax relay)
- Dual tone multifrequency (DTMF) Relay—OOB and RFC2833
- Silence suppression/comfort noise
- G.711 (a-law and u-law), G.729A, G.729AB, G.729, G.729B, G.726
- Support of SRST failover to a Foreign Exchange Office (FXO) or BRI backup port connected to PSTN in case of WAN failure
- Direct inward dialing (DID) on FXS

## Cisco 890 Series ISRs

The Cisco 890 series ISRs are fixed-configuration data routers. These routers have a Gigabit Ethernet WAN port and data backup ports.

The Cisco 890 Series ISRs support the AIM2-CUE-K9 and AIM2-APPRE-104-K9.

[Table 1-3](#) gives the port configurations for the Cisco 890 Series ISRs.

**Table 1-3** Port Configurations of the Cisco 890 Series ISRs

Model	WAN Port	Data Backup		
		FE	V.92	ISDN
891 and 891W	GE	x	x	—
892 and 892W	GE	x	—	x

The following features are supported:

- [8-port 10/100 FE LAN Switch, page 1-4](#)
- [802.11n Wireless LAN Option, page 1-5](#)
- [Real-Time Clock, page 1-5](#)
- [Security Features, page 1-5](#)

## 8-port 10/100 FE LAN Switch

This switch provides eight ports for connecting to 10/100BASE-T FE LANs, access points, or IP phones. In addition, an upgrade is available that gives Power over Ethernet (PoE) on four of the ports to provide power to access points or phones.

## 802.11n Wireless LAN Option

The Cisco 890W series ISRs have integrated 802.11b/g/n and 802.11a/n dual radio modules for wireless LAN connectivity. With these modules, the router can act as an access point in the local infrastructure.

## Real-Time Clock

A real-time clock (RTC) provides date and time when the system is powered on. The RTC is used to verify the validity of the Certification Authority stored on the router.

## Security Features

The Cisco 890 platforms provide the following security features:

- Intrusion Prevention System (IPS)
- Dynamic Multipoint VPN (DMVPN)
- IPsec
- Quality of service (QoS)
- Firewall
- URL filtering

## Licensing

The Cisco 860, Cisco 880, and Cisco 890 ISRs ship with licensed software installed. Software features may be upgraded and the software licenses may be managed through *Cisco Licensing Manager*. See [Software Activation On Cisco Integrated Services Routers](#) on Cisco.com for details.

When you order a new router, you specify the software image and feature set that you want. The image and feature set are installed on your router before you receive it, so you do not need to purchase a software license. The router stores the software license file on the flash memory.

## Selecting Feature Sets

Some feature sets are bundled and offered with a software license that is installed on the hardware platforms. For a list of features available with a software license on the Cisco 860, Cisco 880, and Cisco 890 platforms, see the [Cisco 860 Data Sheet](#), the [Cisco 880 Data Sheet](#), and the [Cisco 890 Data Sheet](#). See [Cisco IOS Software Activation Tasks and Commands](#) on Cisco.com for details about how to activate and manage the software licenses.

