



Configuring Power Efficiency Management

The Cisco 3900 series, Cisco 2900 series, and Cisco 1900 series integrated services routers generation 2 (ISR G2) have hardware and software features for reducing power consumption. The hardware features include high-efficiency AC power supplies and electrical components with built-in power saving features, such as RAM select and clock gating. See your router's hardware installation guide for more information on these hardware features. The software features include EnergyWise, a power efficiency management feature that will power down unused modules, and disable unused clocks to the modules and peripherals on the router. ISR G2s must be running Cisco IOS Release 15.0(1)M or later to support EnergyWise. Detailed configuration procedures are included in the *Cisco EnergyWise Configuration Guide*, which can be found at Cisco.com.

The following sections provide general information about the EnergyWise feature running on ISR G2s:

- [Modules and Interface Supporting EnergyWise, page 125](#)
- [Restrictions for Power Efficiency Management and OIR, page 126](#)

Modules and Interface Supporting EnergyWise

[Table 1](#) lists the modules and interface cards that are supported for use with EnergyWise at the time of this product release.

Table 1 **Modules that Support the Power Efficiency Management Feature**

Type of Module	Module Name
SM	SM-ES2-16-P
	SM-SRE
NM	NM-16-ESW ¹
NME	NME-16ES-1G-P
HWIC	HWIC-4ESW-POE
	HWIC-1G-SFP
	HWIC-2FE
ISM	ISM-SRE-300-K9
PVDM3	PVDM3-256
SRE	SM-SRE-700-K9

1. NM-16ESW is not supported on Cisco 3945E and Cisco 3925E.

Restrictions for Power Efficiency Management and OIR

The following restrictions apply when using the power efficiency management feature:

- The online insertion and removal (OIR) commands cannot be used when a module is in power save mode.
- When the OIR commands are executed, power efficiency management cannot be configured on a service module.