

Green Ethernet Commands

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green-ethernet energy-detect (global)

To enable Green-Ethernet Energy-Detect mode globally, use the **green-ethernet energy-detect** Global Configuration mode command. To disable this feature, use the **no** form of this command.

Syntax

green-ethernet energy-detect

no green-ethernet energy-detect

Parameters

This command has no arguments or keywords.

Default Configuration

Disabled.

Command Mode

Global Configuration mode

Example

```
switchxxxxxx(config)#  green-ethernet energy-detect
```

green-ethernet energy-detect (interface)

Use the **green-ethernet energy-detect** Interface configuration mode command to enable Green Ethernet-Energy-Detect mode on a port. Use the no form of this command, to disable it on a port.

Syntax

green-ethernet energy-detect

no green-ethernet energy-detect

Parameters

This command has no arguments or keywords.

Default Configuration

Disabled.

Command Mode

Interface (Ethernet) Configuration mode

User Guidelines

Energy-Detect only works on copper ports. When a port is enabled for auto selection, copper/fiber Energy-Detect cannot work.

It takes the PHY ~5 seconds to fall into sleep mode when the link is lost after normal operation.

Example

```
switchxxxxxx(config)#  interface gi1/0/1
switchxxxxxx(config-if)#  green-ethernet energy-detect
```

green-ethernet short-reach (global)

Use the **green-ethernet short-reach** Global Configuration mode command to enable Green-Ethernet Short-Reach mode globally. Use the **no** form of this command to disabled it.

Syntax

green-ethernet short-reach

no green-ethernet short-reach

Parameters

This command has no arguments or keywords.

Default Configuration

Disabled.

Command Mode

Global Configuration mode

Example

```
switchxxxxxx(config)#  green-ethernet short-reach
```

green-ethernet short-reach (interface)

Use the **green-ethernet short-reach** Interface Configuration mode command to enable green-ethernet short-reach mode on a port. Use the **no** form of this command to disable it on a port.

Syntax

green-ethernet short-reach

no green-ethernet short-reach

Parameters

This command has no arguments or keywords.

Default Configuration

Disabled.

Command Mode

Interface (Ethernet) Configuration mode

User Guidelines

The VCT length check can be performed only on a copper port operating at a speed of 1000 Mbps. If the media is not copper or the link speed is not 1000, Mbps Short-Reach mode is not applied.

When the interface is set to enhanced mode, after the VCT length check has completed and set the power to low, an active monitoring for errors is done continuously. In the case of errors crossing a certain threshold, the PHY will be reverted to long reach.

Note that EEE cannot be enabled if the Short-Reach mode is enabled.

Example

```
switchxxxxxx(config)#  interface gi1/0/1
switchxxxxxx(config-if)#  green-ethernet short-reach
```

green-ethernet power-meter reset

Use the **green-ethernet power meter reset** Privileged EXEC mode command to reset the power save meter.

Syntax

green-ethernet power-meter reset

Parameters

This command has no arguments or keywords.

Default Configuration

None

Command Mode

Privileged EXEC mode

Example

```
switchxxxxxx#  green-ethernet power-meter reset
```

show green-ethernet

To display green-ethernet configuration and information, use the **show green-ethernet** Privileged EXEC mode command.

Syntax

show green-ethernet [*interface-id* | ***detailed***]

Parameters

- **interface-id**—(Optional) Specifies an Ethernet port
- **detailed**—(Optional) Displays information for non-present ports in addition to present ports.

Default Configuration

Display for all ports. If detailed is not used, only present ports are displayed.

Command Mode

Privileged EXEC mode

User Guidelines

The power savings displayed is relevant to the power saved by:

- Port LEDs
- Energy detect
- Short reach

The EEE power saving is dynamic by nature since it is based on port utilization and is therefore not taken into consideration.

The following describes the reasons for non-operation displayed by this command.

If there are a several reasons, then only the highest priority reason is displayed.

Energy-Detect Non-Operational Reasons		
Priority	**Reason**	**Description**
1	NP	Port is not present
2	LT	Link Type is not supported (fiber, auto media select)
3	LU	Port Link is up – NA

Short-Reach Non-Operational Reasons		
Priority	**Reason**	**Description**
1	NP	Port is not present
2	LT	Link Type is not supported (fiber)
3	LS	Link Speed Is not Supported (10mbps,100mbps)
4	LL	Link Length received from VCT test exceeds threshold
6	LD	Port Link is Down – NA

Example

```
switchxxxxxx#  show green-ethernet
Energy-Detect mode: Enabled
Short-Reach mode: Disabled
Disable Port LEDs mode: Enabled
Power Savings: 24% (1.08W out of maximum 4.33W)
Cumulative Energy Saved: 33 [Watt*Hour]
* Estimated Annual Power saving: 300 [Watt*Hour]
* Annual estimate is based on the saving during the previous week
NA – information for previous week is not available
Short-Reach cable length threshold: 50m
Port     Energy-Detect       Short-Reach           VCT Cable
      Admin Oper Reason   Admin Force Oper Reason   Length
----  ----- ---- -------  ----- ----- ---- -------  ------
gi1/0/1   on    on            off  off   off
gi1/0/2   on    off  LU       on   off   on           < 50
gi1/0/3   on    off  LU       off  off   off
```