



# Network Switch CLI Guide

## Green Ethernet

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# Green Ethernet

## green-ethernet energy-detect (global)

<b>Syntax</b>	<b>green-ethernet energy-detect</b> <b>no green-ethernet energy-detect</b>
<b>Parameters</b>	This command has no arguments or keywords.
<b>Default Configuration</b>	Disabled.
<b>Command Mode</b>	Global configuration mode.
<b>Usage</b>	To enable Green-Ethernet Energy-Detect mode globally, use the <b>green-ethernet energy-detect</b> Global Configuration mode command. To disable this feature, use the <b>no</b> form of this command.
<b>Example</b>	switchxxxxxx(config)# <b>green-ethernet energy-detect</b>
<b>User Guideline</b>	-

## green-ethernet energy- detect (interface)

<b>Syntax</b>	<b>green-ethernet energy-detect</b> <b>no green-ethernet energy-detect</b>
<b>Parameters</b>	This command has no arguments or keywords.
<b>Default Configuration</b>	Enabled.
<b>Command Mode</b>	Interface (Ethernet) Configuration mode.
<b>Usage</b>	Use the <b>green-ethernet energy-detect</b> Interface configuration mode command to enable Green Ethernet-Energy-Detect mode on a port. Use the <b>no</b> form of this command, to disable it on a port.
<b>Example</b>	switchxxxxxx(config)# <b>interface te1/0/1</b> switchxxxxxx(config-if)# <b>green-ethernet energy-detect</b>
<b>User Guideline</b>	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.

### green-ethernet short-reach (global)

<b>Syntax</b>	<b>green-ethernet short-reach</b> <b>no green-ethernet short-reach</b>
<b>Parameters</b>	This command has no arguments or keywords.
<b>Default Configuration</b>	Disabled.
<b>Command Mode</b>	Global Configuration mode.
<b>Usage</b>	Use the <b>green-ethernet short-reach</b> Global Configuration mode command to enable Green-Ethernet Short-Reach mode globally. Use the <b>no</b> form of this command to disabled it.
<b>Example</b>	switchxxxxxx(config)# <b>green-ethernet short-reach</b>
<b>User Guideline</b>	-

### green-ethernet short-reach (interface)

<b>Syntax</b>	<b>green-ethernet short-reach</b> <b>no green-ethernet short-reach</b>
<b>Parameters</b>	This command has no arguments or keywords.
<b>Default Configuration</b>	Disabled.
<b>Command Mode</b>	Interface (Ethernet) Configuration mode.
<b>Usage</b>	Use the <b>green-ethernet short-reach</b> Interface Configuration mode command to enable green-ethernet short-reach mode on a port. Use the <b>no</b> form of this command to disable it on a port.
<b>Example</b>	switchxxxxxx(config)# <b>interface te1/0/1</b> switchxxxxxx(config-if)# <b>green-ethernet short-reach</b>
<b>User Guideline</b>	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 1000Mbps Short-Reach mode is not applied. When the interface is set to enhance 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.
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### green-ethernet power-meter reset

<b>Syntax</b>	<b>green-ethernet power-meter reset</b>
<b>Parameters</b>	This command has no arguments or keywords.
<b>Default Configuration</b>	None.
<b>Command Mode</b>	Privileged EXEC mode.
<b>Usage</b>	Use the <b>green-ethernet power meter reset</b> Privileged EXEC mode command to reset the power save meter.
<b>Example</b>	switchxxxxxx# <b>green-ethernet power-meter reset</b>
<b>User Guideline</b>	-

### show green-ethernet

<b>Syntax</b>	<b>show green-ethernet [interface-id   detailed ]</b>
<b>Parameters</b>	interface-id—(Optional) Specifies an Ethernet port <b>detailed</b> —(Optional) Displays information for non-present ports in addition to present ports.
<b>Default Configuration</b>	Display for all <b>ports</b> . If detailed is not used, only present ports are displayed.
<b>Command Mode</b>	Privileged EXEC mode.
<b>Usage</b>	To display green-ethernet configuration and information, use the show green-ethernet Privileged EXEC mode command.
<b>Example</b>	switchxxxxxx# <b>show green-ethernet</b>  Energy-Detect mode: Enabled  Short-Reach mode: Disabled  Power Savings: 24% (1.08W out of maximum 4.33W) Cumulative Energy

	<p>Saved:33[Watt*Hour] Short-Reachcablelengththreshold:50m</p> <table border="1"> <thead> <tr> <th>Port</th> <th>Energy-Detect</th> <th>Short-Reach</th> <th>VCT Table</th> <th>Admin Open Reason</th> <th>Admin Force Open Reason</th> <th>Length</th> </tr> </thead> <tbody> <tr> <td>te1/0/1</td> <td>on</td> <td>on</td> <td></td> <td>off</td> <td>off</td> <td>off</td> </tr> <tr> <td>te1/0/2</td> <td>on</td> <td>off</td> <td>LU</td> <td>on</td> <td>off</td> <td>on &lt;50</td> </tr> <tr> <td>te1/0/3</td> <td>on</td> <td>off</td> <td>LU</td> <td>off</td> <td>off</td> <td>off</td> </tr> </tbody> </table>	Port	Energy-Detect	Short-Reach	VCT Table	Admin Open Reason	Admin Force Open Reason	Length	te1/0/1	on	on		off	off	off	te1/0/2	on	off	LU	on	off	on <50	te1/0/3	on	off	LU	off	off	off								
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<p><b>User Guideline</b></p>	<p>The power savings displayed is relevant to the power saved by: Energy detect</p> <p>Short reach the EEE power saving is dynamic by nature since it is based on port utilization and is therefore not taken into consideration.</p> <p>The following describes the reasons for non-operation displayed by this command.</p> <p>If there are a several reasons, then only the highest priority reason is displayed.</p> <table border="1"> <thead> <tr> <th colspan="3">Energy-Detect Non-Operational Reasons</th> </tr> <tr> <th>Priority</th> <th>Reason</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NP</td> <td>Port is not present</td> </tr> <tr> <td>2</td> <td>LT</td> <td>Link Type is not supported (fiber, auto media select)</td> </tr> <tr> <td>3</td> <td>LU</td> <td>Port Link is up - NA</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="3">Short-Reach Non-Operational Reasons</th> </tr> <tr> <th>Priority</th> <th>Reason</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NP</td> <td>Port is not present</td> </tr> <tr> <td>2</td> <td>LT</td> <td>Link Type is not supported (fiber)</td> </tr> <tr> <td>3</td> <td>LS</td> <td>Link Speed Is not Supported (10mbps,100mbps)</td> </tr> <tr> <td>4</td> <td>LL</td> <td>Link Length received from VCT test exceedsthreshold</td> </tr> <tr> <td>6</td> <td>LD</td> <td>Port Link is Down - NA</td> </tr> </tbody> </table>	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 exceedsthreshold	6	LD	Port Link is Down - NA
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