

# Network Transmission Products

## Ethernet Over Coax Media Converter

### Overview

GE Security's MCE-Coax is a high-performance converter that combines two well-proven technologies—Ethernet and VDSL—to effectively upgrade legacy devices to new IP-based digital devices. Converting between twisted pair (UTP) and coaxial, this technology offers the fastest data transmission speeds over existing coaxial cable without the need of rewiring.

The MCE-Coax Converter provides a quick replacement and smooth migration solution from an existing analog coax system to a full digital system. This unit is ideal for extending the distance and signal conversion and, because the converter allows the transmission of Ethernet format data using coaxial cable instead of new wire, it also saves wiring costs.

The converter offers plug-and-play functionality, with no software configuration required, and is fully compliant with multiple network protocols. Moreover, the rich diagnostic LEDs on the front panel provide the operating status of individual ports as well as the whole system. There are two selectable models of the MCE-Coax, one for client-side (CPE) and the other for central-side (CO) operation.

### Standard Features

- Cost-effective VDSL2 CO/CPE bridge solution
- One-box design, CO/CPE selectable via DIP switch
- Complies with multiple standards including IEEE802.3, IEEE802.3u and IEEE802.3x
- Discrete Multi-Tone (DMT) line coding
- Half-duplex back pressure and IEEE802.3x full-duplex pause-frame flow control
- Supports up to 1536 bytes packet size, 802.1Q VLAN tag transparent
- VDSL2 stand-alone transceiver for simple bridge modem application
- Plug-and-play installation saves time
- Selectable target data rate and target SNR margin
- Extensive LED indicators for network diagnostics
- Compact size permits wall-mounting

# MCE-Coax Ethernet Over Coax Media Converter



MCE-Coax



## Specifications

Hardware Specification	
Ports: 10/100Base-TX	1 RJ-45, Auto-negotiation and Auto-MDI/MDI-X
Ports: Coaxial	1 BNC, female connector
DIP Switch	4-position DIP switch
Functionality	<ul style="list-style-type: none"> <li>• CO / CPE mode select</li> <li>• Selectable fast and interleaved mode</li> <li>• Selectable target Data rate</li> <li>• Selectable target SNR mode</li> </ul>
Encoding	<ul style="list-style-type: none"> <li>• VDSL-DMT                             <ul style="list-style-type: none"> <li>- ITU-T G.993.1 VDSL</li> <li>- ITU-T G.997.1</li> <li>- ITU-T G.993.2 VDSL2 (Profile 12a Support), Annex A</li> </ul> </li> </ul>
LED Indicators	<ul style="list-style-type: none"> <li>• One Power</li> <li>• 3 for RJ-11/VDSL2 WAN                             <ul style="list-style-type: none"> <li>- Green, LNK/ACT</li> <li>- Green, CO mode</li> <li>- Green, CPE mode</li> </ul> </li> <li>• 2 for RJ-45 10/100Base-TX port                             <ul style="list-style-type: none"> <li>- Green, LNK/ACT</li> <li>- Green, Speed</li> </ul> </li> </ul>
Cabling: Ethernet	<ul style="list-style-type: none"> <li>• 10Base-T: 2-pair UTP Cat.3,4,5 up to 100m (328ft)</li> <li>• 100Base-TX: 2-pair UTP Cat.5, up to 100m (328ft)</li> </ul>
Cabling: VDSL	50 ohm, RG6, RG58A/U, RG58C/U, RG58/U or equivalent 75 ohm, RG59 or equivalent
Performance	<ul style="list-style-type: none"> <li>• 200m -&gt; 100/65Mbps</li> <li>• 400m -&gt; 100/65Mbps</li> <li>• 600m -&gt;100/58Mbps</li> <li>• 800m -&gt;100/52Mbps</li> <li>• 1000m -&gt; 100/42Mbps</li> <li>• 1200m -&gt;90/36Mbps</li> <li>• 1400m -&gt; 80/27Mbps</li> <li>• 1600m-&gt; 70/10Mbps</li> </ul>
Dimensions (H x W x D)	3.82 x 2.76 x 1.02 in. 97 x 70 x 26mm
Weight	0.44 lbs/200g
Reliability	MTBF > 50,000 hrs. @ 25°C

Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE <ul style="list-style-type: none"> <li>• IEEE 802.3 10Base-T</li> <li>• IEEE 802.3u 100Base-TX</li> </ul>
Standards Compliance	<ul style="list-style-type: none"> <li>• ITU-T               <ul style="list-style-type: none"> <li>- G.993.1 (VDSL)</li> <li>- G.997.1</li> <li>- G.993.2 VDSL2 (Profile 12a Support), Annex A</li> </ul> </li> </ul>

Environmental	
Operating	Temperature: 0°C~50°C Relative Humidity: 5%~90% (non-condensing)
Storage	Temperature: -20°C~70°C Relative Humidity: 5%~90% (non-condensing)

Electrical	
Power Requirement	5V, 2A
Power Consumption	5.60Watts/19 BTU (maximum)

## Ordering Information

MCE-COAX	Ethernet over VDSL 2 Converter
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North America  
T 888-GE-SECURITY  
888-437-3287  
F 503-691-7566  
E sales@ifs.com

Asia  
T 852-2907-8108  
F 852-2142-5063

Australia and New Zealand  
T 613-9239-1200  
F 613-9239-1299

Europe  
T 44-113-238-1668  
F 44-113-253-8121

Latin America  
T 305-593-4301  
F 305-593-4300

gesecurity.com/ifs

Specifications subject to  
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## Dimensional Diagram

