



## ET1100C2 Series

### Industrial 10/100Base-TX Ethernet plus CVBS Over Coax Converter

This quick start guide describes how to install and use the Industrial Coaxial Converter. This is the Coaxial Converter of choice for harsh environments constrained by space.

#### Overview

ET1100C2 is a pair of 10/100Base-TX Ethernet plus CVBS (composite video baseband signal) over coax converters. It completely complies with the international standards such as IEEE 802.3 10Base-T, IEEE802.3u 100Base-TX, and IEEE 802.3X.

The product series consists of a transmitter (ET1100C2-T) and receiver (ET1100C2-R). The maximum transmission distance of a coaxial cable is 300m. The ET1100C2 series products can transmit not only the existing CVBS over the coaxial cable, but also the IP signals of network products (e.g. IP cameras) at the same time. With ET1100C2 series products, it is a cost effective way to upgrade the analogue video surveillance system to workable with the IP cameras to the video surveillance system without laying the cable again.

#### General

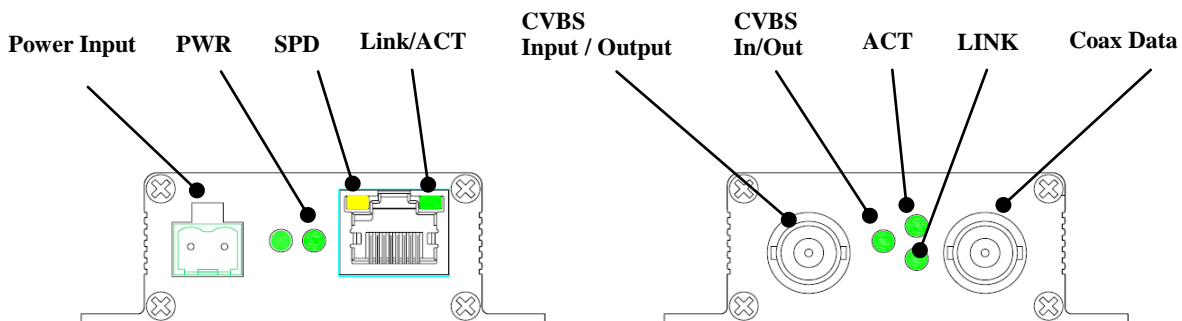
To ensure trouble free transportation and storage, all OT Systems products must be thoroughly inspected, tested and properly packed before delivery. Check the product upon receipt for any visible damage which may have been caused during shipment.

#### Package Content

- Transmitter (ET1100C2-T) or Receiver (ET1100C2-R) of Ethernet Extender over Coaxial Converter x1
- Power Adapter x 1
- Quick Start Guide x 1

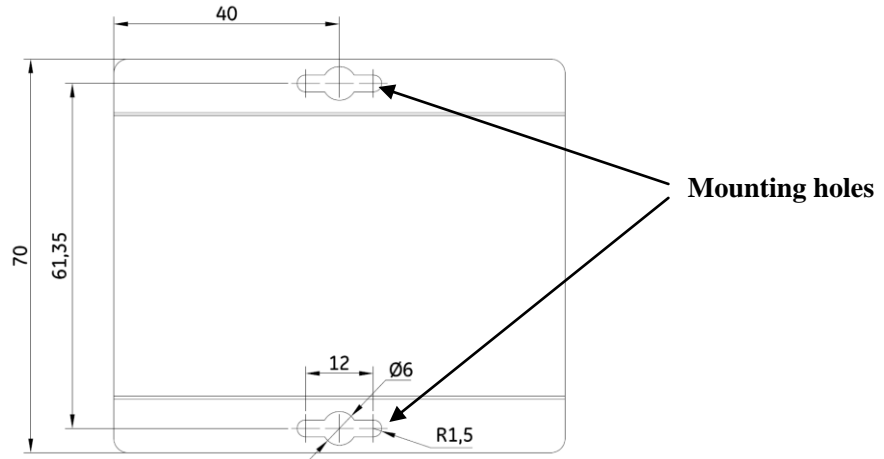
#### Physical Description

##### Front/Rear Panel



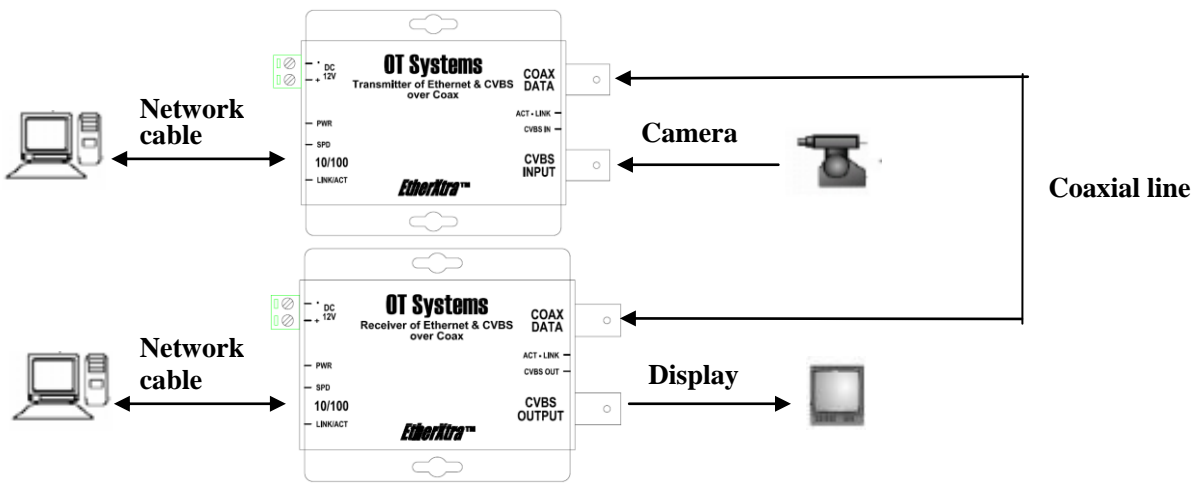
**Installation**

a) The product has two mounting holes. See Figure 1 for its structure. Mount the product on wall or a flat surface.



**Figure 1. Case dimensions**

b) Typical cable connection diagram:



**Installation Steps**

- a) Connect the COAX DATA connector of the transmitter (TX) and receiver (RX) with coaxial cable.
- b) At TX side, connect the analogue camera video signal to the CVBS INPUT connector with coaxial cable, the IP camera signal to the Ethernet port (10/100) with network cable.
- c) At RX side, connect the monitor to the CVBS OUTPUT with the coaxial cable, the NVR/switch to the Ethernet port (10/100) with network cables to the switch or PC.
- d) The PWR light is on when the product is powered on. Check if the power cable is working properly.
- e) After all cables are correctly connected, the indicators will be lit as per port status LEDs (page 3).



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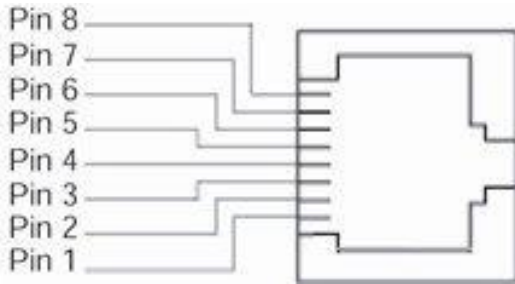
Industrial 10/100Base-TX Ethernet plus CVBS Over Coax Converter

### Interface

#### Ethernet Port:

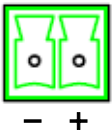
a) Ethernet port RJ45:

10/100M Ethernet port pin sequence diagram:



Pin	MDI Signal Definition	MDIX Signal Definition
1	TD+	RD +
2	TD-	RD-
3	RD +	TD+
4	NC	NC
5	NC	NC
6	RD-	TD-
7	NC	NC
8	NC	NC

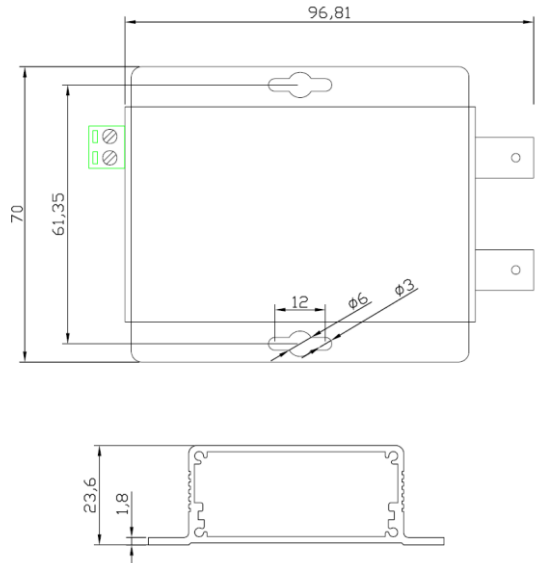
### Power Connection



12VDC	-	GND	Terminal Block
	+	12V	

**The Port Status LEDs, dimension drawing of the Micro unit**

Indicator		Color	Description
PWR		Green	Power on.
		Off	Power off.
COAX DATA	LINK	Green	The COAX DATA link (between TX & RX) is established.
	ACT	Flashing	Data is being transmitted or received. ACT Stands for Activity.
CVBS IN (TX only)		Green	Video input
CVBS OUT (RX only)		Green	Video output
10/100 (Ethernet)	SPD	Orange	100Base-TX
		Off	10Base-TX
	LINK/ACT	Steady	A valid network connection is established
		Flashing	Data is being transmitted or received. ACT Stands for Activity.



**Functional Description**

- Ethernet Extension : Security Link over Coax
- Simultaneous transmission of IP and CVBS over single coaxial cable
- Constant Data Rate : 36Mbps(Downlink)/11Mbps(Uplink)
- Maximum distance : 300m over Coax(RG-59/U)
- Support Auto MDI/MDI-X
- -10°C to 60°C operating temperature.

**Assembly, Startup, and Dismantling**

**Installation**

- Installation: Mount the Micro type unit onto a fixture, or camera housings, e.g. a plank, (either on the wall or on a flat surface) with at least 2 screws piercing through the holes on the mounting frame to secure it in position.
- Startup: Connect the supply voltage to start up the Media Converter via the terminal block.
- Dismantling: Locate and remove the securing screws. Usually, but not limited to, at least 2 screws.

**Manual** Earth Green manual is available on our website [www.ot-systems.com](http://www.ot-systems.com)