






# Expansion port **ETH**

**USER'S GUIDE**

## Used symbols

-  Danger – important notice, which may have an influence on the user’s safety or the function of the device.
-  Attention – notice on possible problems, which can arise in specific cases.
-  Information, notice – information, which contains useful advice or special interest.

## GPL license

Source codes under GPL license are available free of charge by sending an email to [info@conel.cz](mailto:info@conel.cz).



**Declared quality system  
ISO 9001**

Conel s.r.o., Sokolska 71, 562 04 Usti nad Orlici, Czech Republic  
Issue in CZ, 12/15/2011





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## 1. Safety instructions

*Please observe the following safety instructions:*

- The expansion port must be used in compliance with all applicable international and national laws and in compliance with any special restrictions regulating the utilization of the communication module in prescribed applications and environments.
- Use only the original Conel company accessories. Thus you will prevent possible health risks and damage to the devices and ensure compliance with all relevant provisions. Unauthorised adjustments or use of unapproved accessories may result in damage to the expansion port and breach of applicable laws. Use of unapproved adjustments or accessories may lead to cancellation of guarantee, which has no effects on your legal rights.
- Do not expose the expansion port to extreme conditions. Protect it from dust, moisture and heat.



## 2. Product disposal instructions

The WEEE (Waste Electrical and Electronic Equipment: 2002/96/EC) directive has been introduced to ensure that electrical/electronic products are recycled using the best available recovery techniques to minimize the impact on the environment. This product contains high quality materials and components which can be recycled. At the end of its life this product **MUST NOT** be mixed with other commercial waste for disposal. Check with the terms and conditions of your supplier for disposal information.

## 3. Expansion port description

The expansion port ETH is created as expansion port which enables to use of the next hardware interface of Conel modems for next signal processing. This interface is physical connected on RJ45 connector on appropriate modem. The expansion port ETH is internal supplies from appropriate modem. Against bus overload the expansion port ETH is protect.



Expansion port ETH is possible fitted only into PORT1.



## 4. Connection of connector

Panel socket RJ45.

Pin number	Signal mark	Description	Data flow direction
1	TXD+	Transmit Data – positive pole	Input/Output
2	TXD-	Transmit Data – negative pole	Input/Output
3	RXD+	Receive Data – positive pole	Input/Output
4	---	---	
5	---	---	
6	RXD-	Receive Data – negative pole	Input/Output
7	---	---	
8	---	---	

Table 1: Connection of ETH connector

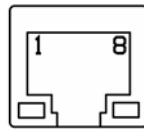


Fig. 1: ETH port connector



**ATTENTION! Port ETH is not POE (Power Over Ethernet) compatible!**



The ETH router connection:

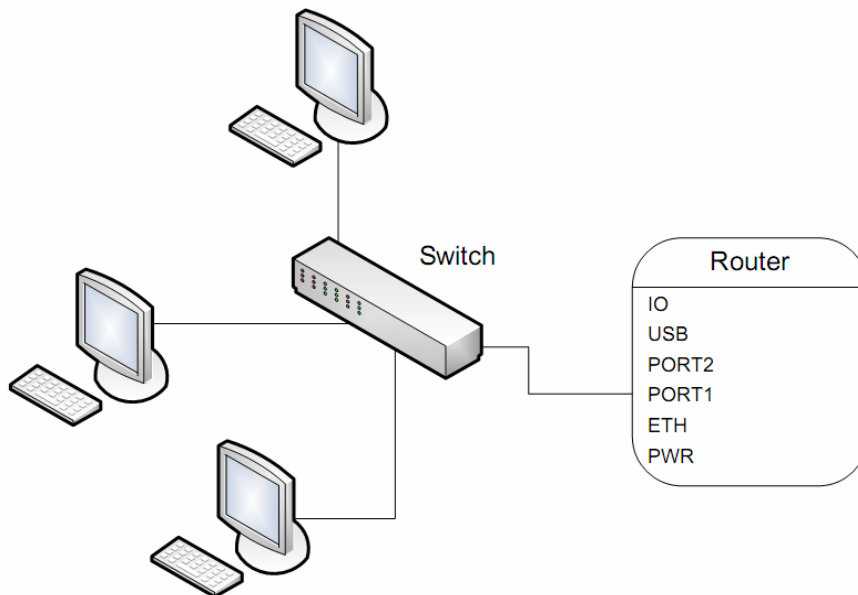


Fig. 2: Example of router ETH connection

## 5. State indication

LED port indicator	
Green LED	On ..... selected 100 Mbit/s Off ..... selected 10 Mbit/s
Yellow LED	On..... the network cable is connected Blinking ..... data transmission Off ..... the network cable is not connected

Table 2: State indication



Status indication is supported from 2nd revision of boards.

## 6. Delivery identification

Trade name	Type name	Power supply
XC-ETH	XC-ETH	Internal supply

Table 3: Delivery identification

Example of expansion port ETH label:

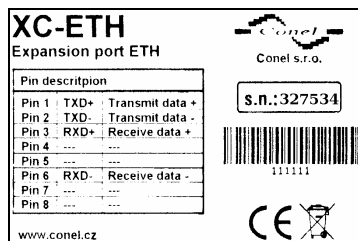


Fig. 3: Port ETH label

## 7. Technical specification

Expansion port ETH		
Power supply	Internal	3,3V
Environment	Operating temperature	-30 .. +60 °C
	Storage temperature	-30 .. +85 °C
Standards	Emission	EN 55022/B
	Immunity	ETS 300 342
	Safety	EN 60950
Ethernet (IEEE 802.3)	Max. bit rate	100 Mbps
	Max. total cable length (300Bd, 200nF/km)	100 m

Table 4: Technical specification

## 8. Recommended literature

[1] Conel: Application guide – Expansion port mounting.

## 9. Customers support

Up to date information about the product is on website:

<http://www.conel.cz/>

### **Upkeep-advice:**

During cleaning of the router do not use aggressive chemicals, solvents and abrasive cleaners!

Conel Company hereby declares that the router narrated in this user's guide fits all basic demands of directive 1999/5/EC (R&TTE).

Router fits values of coefficient SAR defined by association ICNIRP and values of "About protection of health before non-ionized radiation".



Declaration about consistency was issued and is possible get it in accompanying CD or at producer.