
Basic documentation
FOR MULTIMEDIA AND COMMUNICATION MODULES
FOXBERRY

TXN 141 80.01

TXN 141 80.02

1st issue -November 2014

1. DESCRIPTION AND PARAMETERS

Modules TXN 141 80.01 and TXN 141 80.02 consist of small Raspberry Pi B computer which is running on Linux distribution OpenELEC (<http://openelec.tv/>). This distribution is based on the multimedia player XBMC (<http://kodi.tv/>). Communication with PLC is ensured by preinstalled service PLCComS ([TXV13863_01.pdf](#)) which is available on port 5010. XBMC remote controle, if enabled, is available on port 9090.

1.1 BASIC PARAMETERS

Device type	TXN 141 80.01 box TXN 141 80.02 built-in (DIN rail mounting)
Class of electrical device protection – ČSN EN 61140:2003 (idt IEC 61140:2001)	II
Cover ČSN EN 60529:1993 (idt IEC 529:1989)	IP20
Power supply (SELV)	5 V DC from attached 230 V AC adaptor
Power input	Typ. 3.5 W at full load
Weight	TXN 141 80.01 0.18 kg TXN 141 80.02 0.1 kg
Dimensions (h × w × d)	TXN 141 80.01 31 × 61 × 97 mm TXN 141 80.02 62 × 71.3 × 90.5 mm

1.2 OPERATING CONDITIONS

Areas – ČSN 33 2000-3:1995 (mod IEC 364-3:1993)	normal
Operating temperature range	–0 °C to +55 °C
Permissible temperature during the transport	–25 °C to +70 °C
Relative air humidity	10 % to 95 % without condensation
Atmospheric pressure	Min. 70 kPa (< 3000 m over sea level)
Degree of pollution – ČSN EN 60664-1:2004 (mod IEC 60664-1:1992)	1
Overvoltage category of installation – ČSN EN 60664-1:2004 (mod IEC 60664-1:1992)	II
Working position	TXN 141 80.01 any TXN 141 80.02 vertical
Type of operation	Continuous
Electromagnetic compatibility/Emissions – ČSN EN 55022:1999 (mod CISPR22:1997)	class A ¹⁾
Electromagnetic compatibility/Immunity	min. according to requirements of ČSN EN 55022:2004
Resistance against vibrations (sinusoidal) ²⁾	10 Hz to 57 Hz amplitude 0.075 mm, 57 Hz to 150 Hz acceleration 1 G

¹⁾ In indoor conditions (i.e. such conditions, where using of radio and TV sets can be supposed in a distance of 10 m from the mentioned equipment), the product can cause radio disturbances. It might be required in such cases that the user takes necessary measures to avoid this.

²⁾ Fc test according to ČSN EN 60068-2-6 (idt IEC 68-2-6:1995), 10 cycles in each axe.

2. PACKAGING, TRANSPORTATION, STORAGE

The module is packed according to internal packing instructions into a cardboard box. Součástí balení je i tato dokumentace. The external packaging is done according to the quantity and way of transportation into a shipping container being labelled and containing all the necessary data for transportation.

The goods is transported from the manufacture's facilities as agreed when placing an order. Transportation of the goods by the customer must be pursued by covered transport means and in the position as indicated on the packaging. The shipping containers must be fixed in such a way to avoid accidental spontaneous movement and damage of the external container during transport.

During transportation and storage, the product must be protected from direct influence of atmospheric actions. Transportation of the product is permitted within a temperature range of 25 °C to 70 °C, relative humidity of 10 % to 95 % (without condensation) and minimum atmospheric pressure higher than 70 kPa.

The product must be stored only in clean spaces free from conductive dust, aggressive gases and vapours. The optimum storage temperature is 20 °C.

3. INSTALLATION

Module TXN 141 80.02 is installed in the vertical position on DIN rail according to ČSN EN 50022.

4. MODULE OPERATION

4.1 INSTALLATION

Connect the module with TV or monitor by suitable cable (according to the type of input interface use HDMI-HDMI or HDMI-DVI cable). Connect mouse to any USB port. Connect ethernet cable. Insert attached SD card labelled by firmware version to the slot for a memory card. For module feeding use attached power adaptor.

When adaptor is inserted to 230 V AC socket, the module starts to work and in a while OpenELEC logo appears on the screens and after approximately 30 s XBMC and PLCComS applications starts.

When running first time, configuration wizard starts. There it is necessary to set some basic parameters. As one of them SMB service has to be enabled. It is very important for later firmware updates.

4.2 USE

FoxBerry can be used as a multimedia center that allows to play movies, music or view photos. It can be operated by USB mouse, TV remote controller or via PLC Tecomat FoxTrot using XBMC Lib functions ([TXV00381_01.pdf](#)).

Further, the module can be used as a communication server after connection to PLCComS service. The connection can be established from any user application or from any operator panel made by Teco (for example ID-18, ID-28, ID-31, ID-32). In case of use of Teco operator panel, panel has to be set up. It can be done from any computer with web browser. Open web browser and enter panel IP address. When the configuration page is opened, choose **Network** item in the left menu. On this page change item **PLCComS IP Address** to actual FoxBerry module IP address and item **PLCComS Port** to 5010.

5. FIRMWARE UPDATE

Connect TV or monitor, USB mouse and a computer using ethernet interface to switched off FoxBerry module. Then connect power adaptor to FoxBerry and wait when applications start. Using PC, load proper file with firmware to its network folder \\OPENELEC\\Update. Firmware can be downloaded from <http://www.tecomat.com/index.php?a=cat.30>.

It is possible to update individual parts of firmware, namely:

OpenELEC - OpenELEC-RPi.arm-X.Y.Z.tar (<http://openelec.tv/>)

PLCComS - PLCComS_vX.Y.zip (<http://www.tecomat.com/index.php?a=cat.413>)

where X, Y, Z are firmware version numbers. Then select on TV screen or monitor the item **Restart**. After the module restart an automatic update is executed which is finished by the restart again. After that new restart the module is already running with new firmware version.

6. GUARANTEE

The guarantee and complaint conditions are governed by the *Business conditions of Teco a.s.*

We reserve the right to make modifications and/or changes of the documentation without prior notice.



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