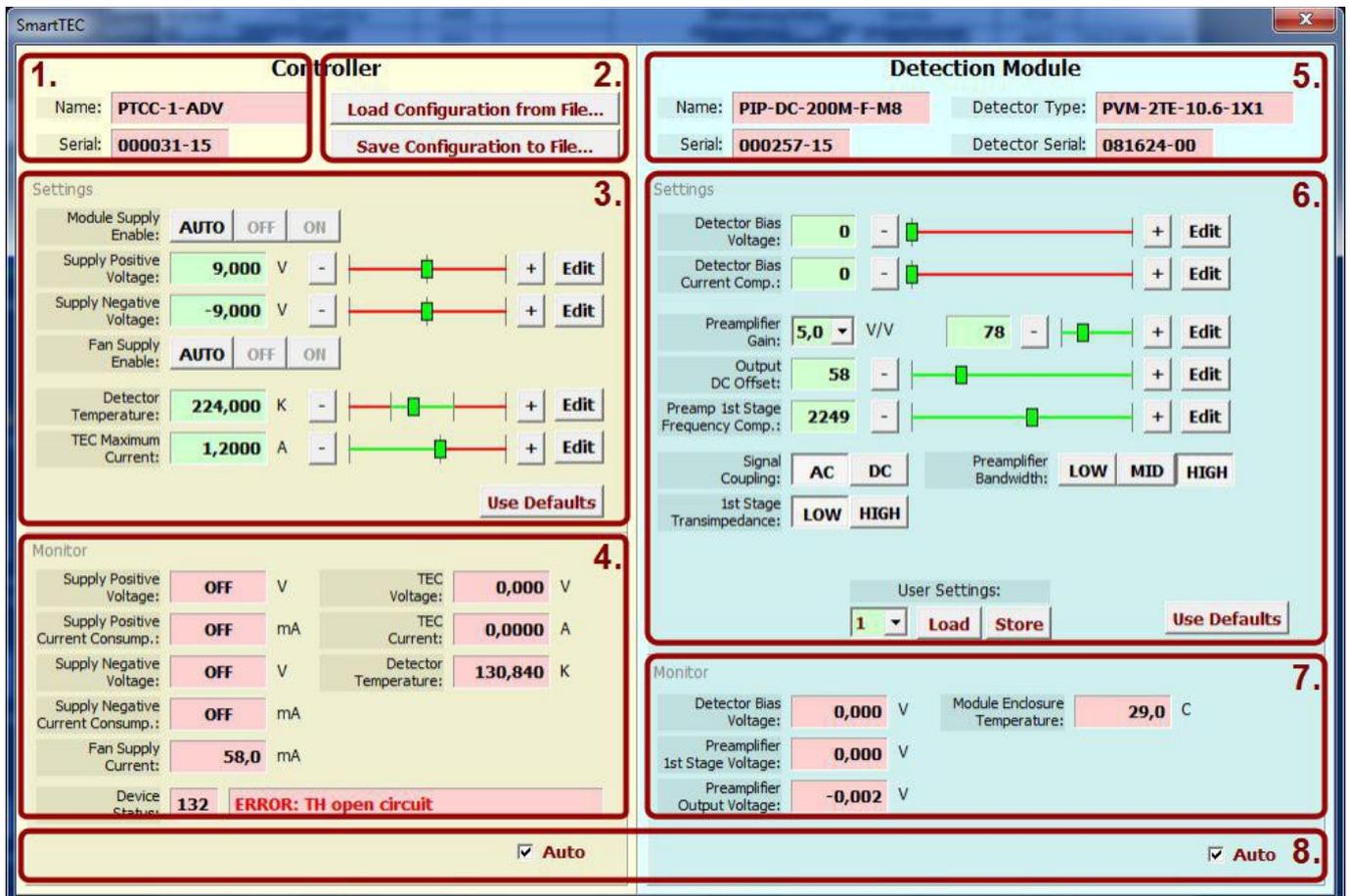


8. PC Software Description "Smart Manager"

8.1. Program Description

Smart Manager is easy to use tool to control PTTC controller.

The PC software is showing all PTTC-01-ADV menus in one window.



The screenshot displays the SmartTEC software interface, which is divided into several sections:

- 1. Controller:** Shows the device name (PTCC-1-ADV) and serial number (000031-15). It includes buttons for "Load Configuration from File..." and "Save Configuration to File...".
- 2. Detection Module:** Shows the device name (PIP-DC-200M-F-M8), detector type (PVM-2TE-10.6-1X1), and serial number (000257-15). It includes a "Detector Serial" field (081624-00).
- 3. Settings:** Contains various adjustable parameters such as Module Supply Enable (AUTO/OFF/ON), Supply Positive Voltage (9,000 V), Supply Negative Voltage (-9,000 V), Fan Supply Enable (AUTO/OFF/ON), Detector Temperature (224,000 K), and TEC Maximum Current (1,200 A). Each parameter has a slider and an "Edit" button.
- 4. Monitor:** Displays real-time status information including Supply Positive Voltage (OFF), Supply Positive Current Consump. (OFF), Supply Negative Voltage (OFF), Supply Negative Current Consump. (OFF), Fan Supply Current (58,0 mA), TEC Voltage (0,000 V), TEC Current (0,0000 A), and Detector Temperature (130,840 K). A "Device Status" field shows "132 ERROR: TH open circuit".
- 5. Detection Module Settings:** Includes Detector Bias Voltage (0), Detector Bias Current Comp. (0), Preamplifier Gain (5,0 V/V), Output DC Offset (58), Preamp 1st Stage Frequency Comp. (2249), Signal Coupling (AC/DC), Preamplifier Bandwidth (LOW/MID/HIGH), 1st Stage Transimpedance (LOW/HIGH), and User Settings (Load/Store buttons).
- 6. Detection Module Monitor:** Shows Detector Bias Voltage (0,000 V), Preamplifier 1st Stage Voltage (0,000 V), Preamplifier Output Voltage (-0,002 V), and Module Enclosure Temperature (29,0 C).
- 8. Auto Update:** A checkbox labeled "Auto" is checked at the bottom of the interface.

1. PTCC version & serial number
2. Storing/loading PTCC & IR detection module configuration data
3. PTCC settings
4. PTCC monitor
5. IR detection module & detector parameters
6. IR detection module settings (available only for PIP)
7. IR detection module (available only for PIP)
8. Automatic PTCC/PIP monitor update

Usually, user settings are available for the adjustment within factory limits (narrower than the hardware limits). For example, if the IR module power supply is +/- 9 V, then allowing the user to manipulate the supply voltage with no limits is considered as a potential source of the module damage. The limits are applied in the factory and user is unable to adjust the values in full range.

In the PC software, there is a green part of the slider showing the parameter range available for the user, or the buttons are clickable. Unavailable buttons are grayed instead.

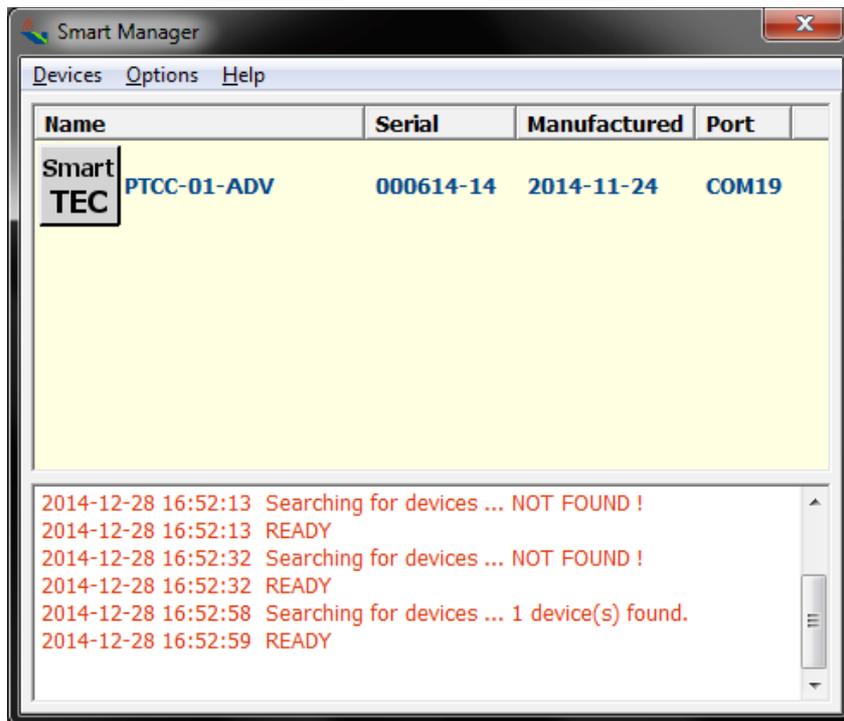


Unavailable buttons are grayed instead.

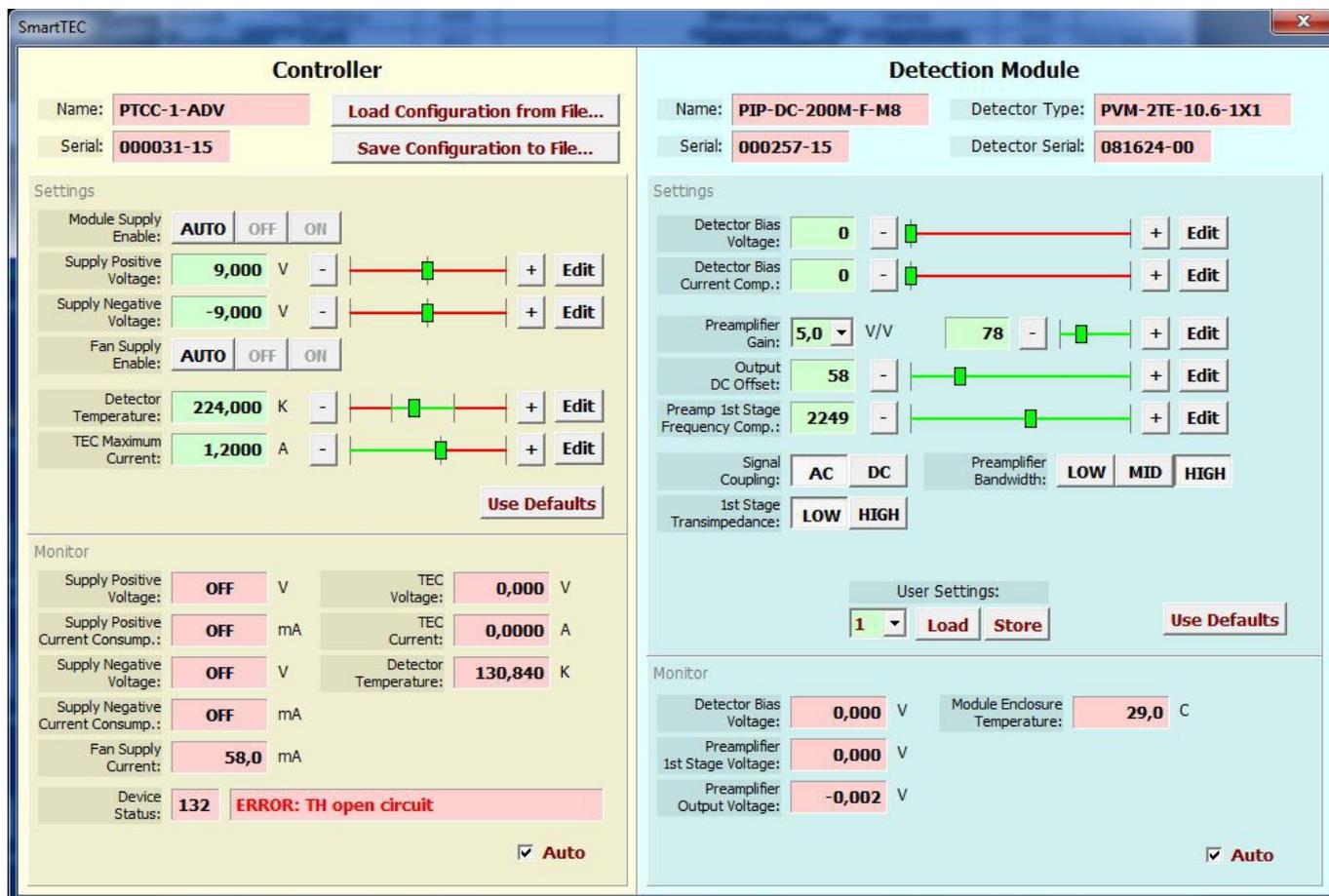


8.2. Smart Manager First Use

To start using the Smart Manager connect PTCC module to USB port in Your PC and open the Smart Manager.



You can see a device list if the list is empty check USB connection and reload device list.
 Devices >> Reload Devices List
 Chose the devices that You want to control and click two times on chosen element.



8.3. Update Procedure

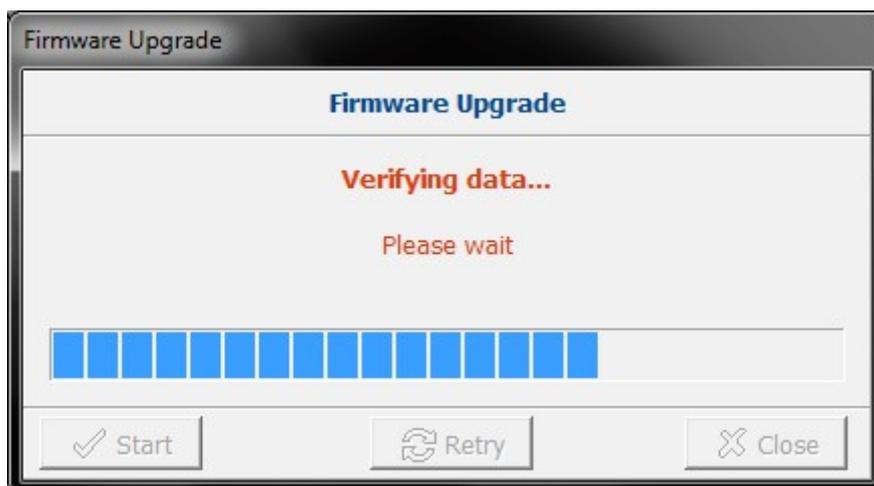
Smart Manager automatically check if any updates to PTCC software are available. If software to update is available Smart Manager send communicate to user.



When user allow to update Smart Manager start update procedure.



User have to follow Instruction showed in Firmware Upgrade window.





9. Safety Instructions

To ensure safe and failure-free operation of the SmartTEC controller, comply with the following precautions:

-  Before connecting the power supply to the mains, make sure it is compatible with the mains voltage and frequency.
-  The power supply is intended for the indoor use.
-  Do not use the controller if the temperature and the air humidity extends the values valid for the PTCC-01-ADV controller.
-  Use the cables delivered by VIGO. In case of OEM systems, make sure the cables match the specification of the controller.
-  Turn off the power supply before plugging/unplugging cables. Avoid static discharges.
-  Use the proper cables to connect elements of the kit, dedicated for specified device only. Never cut or shorten any cable, it may cause damage to your device.