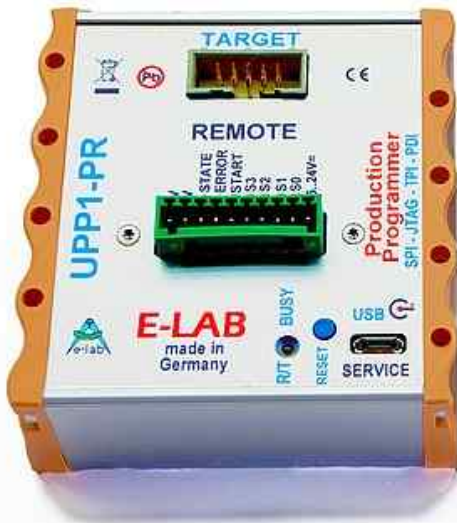


UPP1-P/R with AES encryption



**Production
Programmer**

**with outstanding
features**

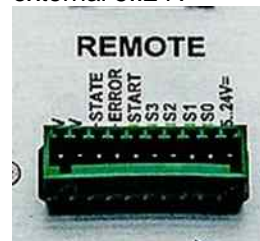
**designed for using in
mass production**

**can be mounted on a
top-hat rail (DIN rail)**

**can be remote
controlled**

Incircuit Programmer for AVR, XMega, AT89Sxx, AT89LSxx, AT89LPxx, TI CC1110, CC2510 and CC2430, SPI-Flash, AVR S1200...Mega2560 in ISP + JTAG Mode, XMega/PDI, Tiny/TPI

- UPP1-P/PR works in the Full-Speed USB-2 mode. Can also be connected to USB-1 ports and HUBs
- No power supply necessary. The UPP1 can be supplied from the PC interface (USB) or from 5..24V (vers UPP1-PR).
- Automatic adaption to the target voltage (1.8-5.5Volt, ca. 60mA)
- Powerful and extensive software
- Software runs on XP/Vista/WIN7/WIN8, 32 and 64bit.
- Small, leightweight and handy device ca. 72x75x30mm
- Supports SPI, JTAG, PDI, TPI programmable **AVRs**
- Supports all **XMegas** in PDI mode
- Supports **Tinys** in TPI mode
- Supports all SPI programmable **AT89Sxx**, **AT89LSxx** and **AT89LPxx** types
- Supports the TI/ChipCon **CC1110**, **CC2510** and **CC2430** family
- Supports the SPI-Flash **AT25DFxxx**, **S25FLxxx** and **SST25VFxxx**
- Programmable output voltage (supply) for the target system. 1.8..5.2Volt 30mA..300mA
- The projects stored into the UPP1 can be **AES** encrypted at project building time, stored onto the device internal flash card and then is decrypted in the UPP1. So a re-engineering is absolutely impossible
- Programs **128kB** Flash in ca. **3sec** (Mega128 JTAG Mode). Tiny44 in **1sec** (16MHz SPI)
- Self update with new firmware through the Internet.
- 2 programming modes, transparent = controlled by the PC and portable = operated from projects stored on the internal micro-SD card (included)
- Upto 16 projects can be stored on the flash card and can be selected by the PC or by the remote lines (PR)
- The version **PR** provides an interface which can be remote controlled by a few wires (level 5..24V). This interface is completely electrical isolated and the device is supplied by an internal SPS connected to the external 5..24V
- **UPP1-P/PR** is optimal suitable for programming stations, repair stations and for production lines. Can be operated without a PC.
- Remote controllable via Telnet, wire interface and a DLL. No USB needed when remote controlled. on-the-fly switching between USB and Remote



UPP1-P	€230.00 +ship
UPP1-PR	€310.00 +ship

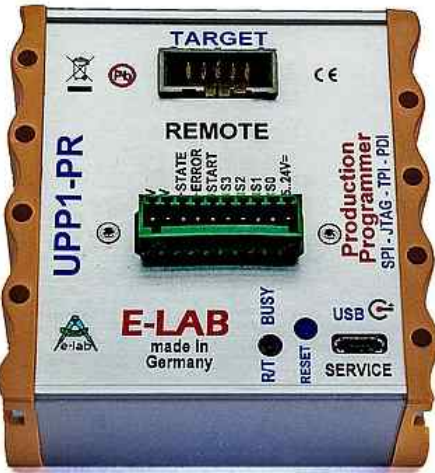
E-LAB Computers
Grombacherstr. 27
D74906 Bad Rappenau

Tel. (49)7268/9124-0
Fax. (49)7268/9124-24
www.e-lab.de info@e-lab.de

E-LAB In-Circuit Programmer

UPP1-P/R

Version **PR** with remote control by wires



With the build-in remote interface the UPP1-PR becomes remote controllable. By 4 control lines one out of 16 projects stored on the flash card can be selected.

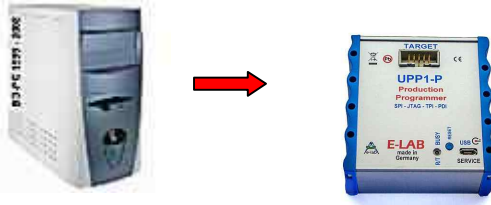
With an additional control line the programming of the selected project can be started. Two output lines return the busy and the error state which must be read and interpreted by the controlling system (PLC, PC etc).

The inputs and outputs are opto isolated and can work with 5Volt= upto 24Volt=. So this version is well predestinated for small to large series production programming.

For small series production purposes the program PackProg is included. The functions are reduced to Load project, program target, test target. No manipulation of fuses etc. possible. For extended security the generated files can be AES encrypted. Remote control via Telnet is supported, also a DLL for extended control.

Data transfer

1. from PC through the programmer into the internal microSD card



Programming

1. from PC without the use of the flash card in **Direct Mode**



2. from PC (AVRprog or PackProg) with the use of the flash card in the UPP-P/R in **Indirect Mode**



3. with remote wires, Telnet or DLL with the use of the internal flash card in **Direct Mode**

E-LAB Computers
Grombacherstr. 27
D74906 Bad Rappenau

Tel. (49)7268/9124-0
Fax. (49)7268/9124-24
www.e-lab.de info@e-lab.de