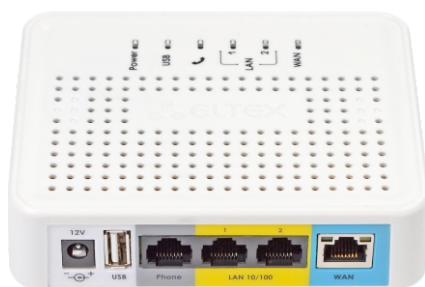
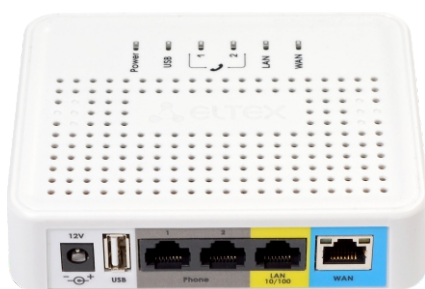


## TAU-1M.IP



- High-quality sound
- Fax transmission
- 3G/4G USB modems support

## TAU-2M.IP



## TAU-4M.IP



- Triple Play
- VLAN per service
- Autoprovision (TR-069, DHCP)

### Home terminal

**TAU-1M.IP** is an access gateway with embedded router. The device has FXS port for analogue telephone connection, 2 LAN 10/100Base-T ports for TV or Set-Top boxes connection. The terminal connects to service provider networks via WAN 10/100Base-T port and has a USB port for 3G/4G modems or USB storage device connection.

### Eltex.ACS (TR-069) management system

Eltex.ACS autoconfiguration system, implemented on the basis of TR-069 protocol, provides operator with a convenient functionality for management of firmware versions and configurations of customer devices. Eltex.ACS loads an individual configuration into a device automatically, in accordance with the subscriber's account data. A function of intellectual upgrading of firmware versions works successively with the devices on the network by updating the groups of devices according to assigned queue discipline. Eltex.ACS system is provided with NorthBoundInterface (NBI) for interacting with OSS complexes.

### Ease of usage

User-friendly control interface with support of multilanguage provides the ease of usage of TAU-1M.IP VoIP gateway on the operator's network.

### Office terminals

**TAU-2M.IP, TAU-4M.IP** – VoIP gateways which are intended for connecting analogue telephone and facsimile sets to an IP network. The service is provided via a converge data transmission network, where different IP-PBX can be used as a switching node.

### Fax transmission

Transmission of facsimile messages is implemented by means of audiocodec G.711 pass-through and according to T.38 protocol.

### High-quality sound

High performance hardware platform based on up-to-date Realtek chipset, support of all basic audio codecs used in VoIP- networks (G.711, G.723.1, G.726, G.729), echo elimination functions, silence detector, comfort noise generator, DTMF signal reception and generation, as well as traffic prioritization mechanism (QoS) provide high quality of voice data.

### Channel redundancy

In case of loss of connection with primary SSW, the device switches to a reserved SSW and monitors state of the primary one. If the device loses connection with both IP servers, calls between local subscribers still can be switched.

### Interfaces configuration

	WAN	LAN	FXS	USB
TAU-1M.IP	1	2	1	1
TAU-2M.IP	1	1	2	1
TAU-4M.IP	1	1	4	1

## Technical features

### Interfaces

- 1 FXS port for TAU-1M.IP
- 2 FXS ports for TAU-2M.IP
- 4 FXS ports for TAU-4M.IP
- 1 WAN 10/100Base-T port
- 2 LAN 10/100Base-T port for TAU-1M.IP
- 1 LAN 10/100Base-T port for TAU-2M.IP
- 1 LAN 10/100Base-T port for TAU-4M.IP
- 1 USB2.0 port

### VoIP protocols

- SIP

### Voice codecs

- G.711 a-law,  $\mu$ -law
- G.722
- G.723.1
- G.726
- G.729 (A/B)

### Fax transmission

- T.38 UDP Real-Time Fax
- a-law,  $\mu$ -law G.711 pass-through

### Voice standards

- VAD (Voice Activity Detection)
- CNG (Comfort Noise Generation)
- AEC (echo cancellation, G.165, G.168 recommendations)

### DTMF

- DTMF signals detection and generation
- Transmission via INBAND, RFC 2833, SIP INFO

### Value Added Services

- Call Hold
- Call Transfer
- Notice of new call arrival (Call Waiting)
- Call forward on busy (CFB)
- Call Forward No Reply (CFNR)
- Call Forward Unconditionally (CFU)
- Caller ID
- Calling line identification restriction (CLIR)
- Hotline/Warmline
- Call Group
- 3-Way conference

### VoIP functionality

- Internal connections switching
- Operating without SIP-server
- Flexible numbering plan
- Parameters profiles for ports
- Settings are applied without rebooting
- IMS (3GPP TS 24.623) support for Hold, CW, 3-Way conference, Hotline services management
- SIP TLS support
- # symbol transmission as %23
- Support of up to 4 redundant SIP servers

### Quality of service (QoS)

- Diffserv and 802.1p priority assignment for SIP and RTP
- Traffic prioritization according DSCP and 802.1p

### Types of connections

- Static IP address
- DHCP client
- PPPoE
- PPTP
- L2TP

### Network functions

- “Bridge” and “router” operation modes
- NAT
- Static routing
- VLAN per service (Internet, VoIP, IPTV)
- IGMP
- DHCP, DNS server on LAN side
- Port forwarding
- Firewall
- 3G/4G router mode
- UPnP

### Supported specifications

- RFC 3261 SIP 2.0
- RFC 3262 SIP PRACK
- RFC 4566 Session Description Protocol (SDP)
- RFC 3263 Locating SIP servers for DNS lookup SRV and A records
- RFC 3264 SDP Offer/Answer Model
- RFC 3311 SIP Update
- RFC 3515 SIP REFER
- RFC 3891 SIP Replaces Header
- RFC 3892 SIP Referred-By Mechanism
- RFC 4028 SIP Session Timer
- RFC 2976 SIP INFO Method
- RFC 2833 RTP Payload for DTMF Digits, Flash event
- RFC 3108 Attributes ecan and silenceSupp in SDP
- RFC 4579 SIP Call Control - Conferencing for User Agents
- RFC 3361 DHCP Option 120
- RFC 3550 RTP A Transport Protocol for Real-Time Applications
- RFC 3611 RTP Control Protocol Extended Reports (RTCP XR)

### Management

- WEB (English and Russian versions)
- Telnet
- SSH
- FTP
- Syslog
- TR-069 (recommended to work with Eltex.ACS server)
- DHCP autoprovisioning (periodically and scheduled)
- SNMP (configuration and monitoring)

## Technical features

### Diagnostics

- Device status monitoring via Web interface
- Debug information output in Syslog/Telnet
- Subscriber lines parameters testing

### Security

- Username and password verification
- Firewall
- Access rights delimitation admin/user/viewer

### USB port

- Connection of USB drive with FAT/FAT32/EXT2/EXT3/EXT4/NTFS file systems
- USB 3G/4G modem connection – operating in 3G/4G router mode

### Main technical features

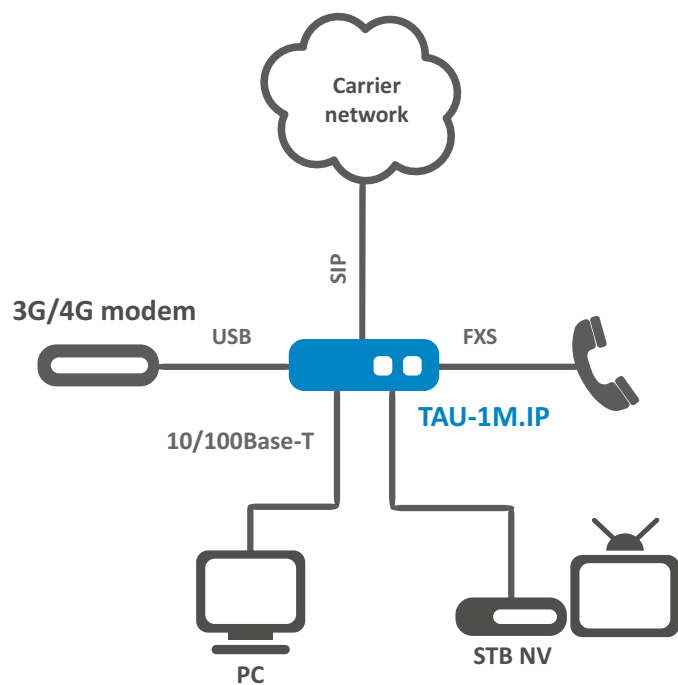
- Realtek 8972C processor
- SDRAM 128 MB
- SPI Flash 8 MB
- OS Linux

### Physical characteristics

- Power adapter: 12V DC, 1 A
- Power consumption: no more than 6 W (TAU-1M.IP),  
no more than 7.2 W (TAU-2M.IP),  
no more than 12.5 W (TAU-4M.IP)
- Operating temperature: from +5 °C to +40 °C
- Operating humidity: 80% max
- Dimensions: 122x96x33 mm (TAU-1M.IP and TAU-2M.IP),  
187x120x32.5 mm (TAU-4M.IP) desktop case

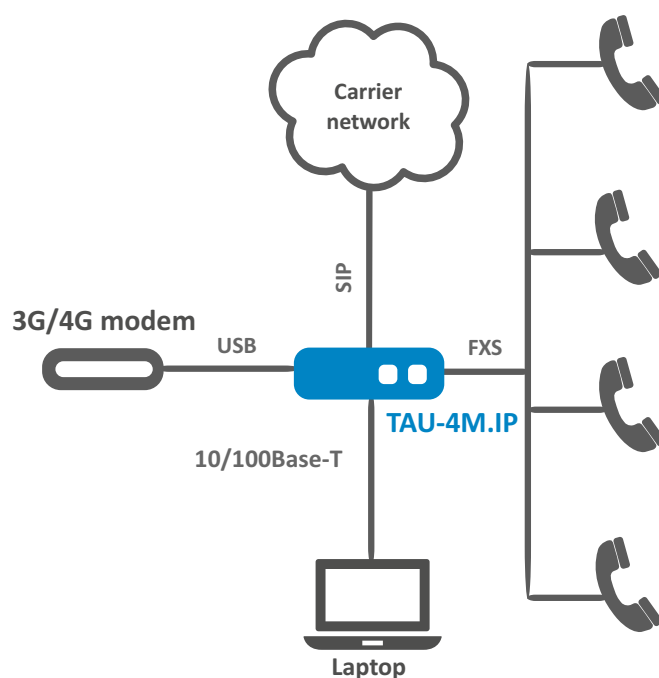
## Use case

TAU-1M.IP






home

TAU-4M.IP



office

## Ordering information


Name	Description	Image
<b>TAU-1M.IP</b>	Subscriber VoIP gateway with integrated TAU-1M.IP router: 1xFXS, 1xWAN, 2xLAN, 1xUSB, SIP	
<b>TAU-2M.IP</b>	Subscriber VoIP gateway with integrated TAU-2M.IP router: 2xFXS, 1xWAN, 1xLAN, 1xUSB, SIP	
<b>TAU-4M.IP</b>	Subscriber VoIP gateway with integrated TAU-4M.IP router: 4xFXS, 1xWAN, 1xLAN, 1xUSB, SIP	

## Related software

<b>ACS-CPE-256</b>	ACS-CPE-256 option of Eltex.ACS system for Eltex CPE autoconfiguration: 256 subscriber devices	
<b>ACS-CPE-512</b>	ACS-CPE-512 option of Eltex.ACS system for Eltex CPE autoconfiguration: 512 subscriber devices	
<b>ACS-CPE-1024</b>	ACS-CPE-1024 option of Eltex.ACS system for Eltex CPE autoconfiguration: 1024 subscriber devices	

## Contact us

## About company

  
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**Eltex company** is a leading Russian developer and manufacturer of telecommunication equipment with 25 years of history. Integrity of solutions and seamless integration capability into Customer infrastructure is a priority area of company development.