

## Data sheet



### Housing

Color display, 320 x 240 pixels (3.5 inch)  
7 x free programmable function keys  
8 x partner keys with LED  
Alphanumeric keyboard

### Interfaces

2 x Gigabit Ethernet: RJ 45 interface incl.  
"Power over Ethernet" 802.3af  
RJ-45 interface (DHSG) for head set  
AUX interface for extension module IP230-X  
(since 02/2012)

### Hardware

Power supply: external PSU: 12 V, 6 W  
Power over Ethernet 802.3af, Class 2  
Operation temperature: 0 °C to +45 °C,  
Storage temperature: -10 °C to +70 °C  
Humidity: 10% to 90% (not condensed)

### Voice codecs

G.711 A-law,  $\mu$ -law  
G.722, G.722.2 (AMR-WB)  
G.729A  
VAD (Voice Activity Detection),  
CNG (Comfort Noise Generation),  
Dynamic Jitter Buffering  
Echo Compensation G.168

### VoIP protocols

H.323 Version 5  
SIP Version 2, conform RFC 3261  
SIP over UDP, TCP, TLS, SIPS  
RTP, SRTP, RTCP

### Network

PPPoE, manual or automatic connection after  
boot  
PPTP Tunneling up to 32 tunnels  
simultaneously, encoding via MPPE  
NAT, H.323-NAT  
RSTP, IEEE 802.1x  
VLAN-ID (DHCP and LLDP/MED support)  
NTP support

**Order number: 01-00241-001**

### Administration

- Password protected administration via web browser, HTTPS
- Save and reload config files
- Automatic update via update server

### Supplementary services (excerpt)

- User interface in 19 languages, others on request
- International character set (UTF-8)
- Internal telephone directory with search function and name resolution
- Integrated LDAP compatible database as telephone directory
- Partner keys displaying availability and call status
- Partner functions to external PBXs over SIP Federation
- Announcement function
- Multiple registration up to six users at the same time
- Call Completion on busy and no reply
- Message Waiting Indication
- Hands free speaking (no open listening)
- Do not disturb
- Mute
- 3 party conference
- Separate login and logout for user groups
- Call pick-up, global and for specific numbers
- Lock & unlock using PIN
- Call forwarding unconditional, busy and no answer
- Call park and unpark
- DTMF tone detection & ringing
- Call transfer with and without consultation
- Call hold / retrieve with music on hold
- Transfer subscriber name for signalling
- Call waiting acoustic and optical signaling of waiting calls