# Information

The complete IP telephone family for SIP



# optiPoint 410 S V7.0 optiPoint 420 S V7.0

Ranging from the optiPoint 410 entry S for basic Voice over IP to the optiPoint 410 advance S for the most demanding telephone users, the right SIP telephone is available for every situation. Fast access to all features via programmable function keys that can easily be labeled individually thanks to the innovative self-labeling key technology of the optiPoint 420 S family.

Siemens Enterprise Communications: www.siemens.com/open



optiPoint adapters and modules allow for complete customization of your workplace requirements. optiPoint SIP phones have been optimized for the use of features of the Siemens HiPath 8000 communication system and integrated in SURPASS Hosted Office Solution – optiPoint phones are the best choice for communication solution SIP based standard platforms in the Enterprise and Carriers market.

# optiPoint 410 S an overview

The optiPoint 410 S telephone family brings you flexible IP telephones with maximum customization capability. A standard user interface and the reliable integration in various SIP-based network solutions make for easy, user-friendly and reliable telephony. Features include call forwarding, call deflection, conferencing and call journals. In addition to a wide variety of models in the family, the modular expansion options of optiPoint 410 S telephones allow for particularly attractive solutions in terms of price you only pay for what you actually need. And operating costs are reduced: plug & play functionality minimizes the time required for installation and consequently reduces costs. This is an investment that also brings long-term benefits for service and maintenance. Upgrading to new features is easy - just download the software - your investment is secure from the outset.

# optiPoint 420 S – tomorrow's office flexibility today

Fast and more secure access to all features - thanks to the user-programmable function keys on the optiPoint telephones and the optiPoint key module. Regardless of whether users configure them themselves to suit their individual requirements - or they are programmed centrally for consistent user guidance - the optiPoint 420 S devices from Siemens are the perfect solution. All the tedious work of writing out the names on paper strips, cutting them out and inserting them has been completely eliminated. Thanks to new, innovative technology for electronic display of key assignments, feature keys are always up to date. Of course you can also customize key assignment to suit your own needs, defining exactly those functions and text labels that you require.

# **Telephones**

# optiPoint 410 entry S

The optiPoint 410 entry S is a cost-effective introduction to IP telephony. The telephone is recommended wherever there are minimum requirements with regard to features and convenience (e.g. logistics facilities, corridors, reception rooms, small hotels, hospitals). However, these devices still bring everything that is to be expected of an IP telephone in terms of simple installation and cost-effective operation, such as plug & play support using the Deployment Service and DHCP, as well as support of QoS mechanisms and an extensive codec selection.

### **Features**

- 8 programmable function keys with LED indicator
- 2 control keys
- Codecs: G.711/723/729/722
- Open listening
- Power over LAN to IEEE802.3af
- Wall-mountable

# optiPoint 410 economy S optiPoint 420 economy S

Equipped with a two-line display and three dialog keys, the optiPoint 410/420 economy S models enable you to control the provided features such as call forwarding, hold, consultation hold or call waiting. The telephone number and name of the caller can also be displayed, of course, making this model eminently suitable for business communication in offices, sales outlets or hotels.

### **Features**

- 2-line alphanumeric display (24 characters each), tiltable
- 12 programmable function keys with LED indicator
- 2 control keys, 3 dialog keys for user prompts
- Extensive telephony- features
- Codecs: G.711/723/729/722
- Open listening
- Power over LAN to IEEE802.3af
- Wall-mountable

# optiPoint 410 /420 economy plus S

These telephones offer two additional features compared with the optiPoint 410/420 economy, making them ideal for use in offices or call centers:

- 10/100 Mbps mini-switch
- 1 port for headset (121TR9-5/Polaris)





# optiPoint 410 standard S optiPoint 420 standard S

These telephones meet all the requirements of a modern office workstation and provide the demanding user with other important functions such as a full-duplex hands-free speakerphone and the option to use additional function key modules.

### **Features**

- 2-line alphanumeric display (24 characters each), backlit, tiltable
- 12 programmable function keys with LED indicator
- 2 control keys, 3 dialog keys for user prompts
- Extensive telephony features
- Codecs: G.711/723/729/722
- Hands-free speakerphone (full duplex)
- 2 adapter slots and interface for up to 2 add-on devices
- 10/100 Mbps mini-switch
- 1 port for headset (121TR9-5/Polaris)
- Power over LAN to IEEE802.3af
- Wall-mountable

# optiPoint 410 advance S optiPoint 420 advance S

This telephone has a four-line display is particularly suitable for use in prestigious environments such as management offices, conference rooms and superior hotel rooms.

#### **Features**

- 4-line alphanumeric display (24 characters each), backlit, tiltable
- 19 and/or 18 programmable function keys with LED indicator
- 2 control keys, 3 dialog keys for user prompts
- Extensive telephony features
- Codecs: G.711/723/729/722
- Hands-free speakerphone (full duplex)
- 1 adapter slot and interface for up to 2 add-on devices
- 10/100 Mbps mini-switch
- 1 port for headset (121TR9-5/Polaris)
- USB master port
- Power over LAN to IEEE802.3af
- Wall-mountable

### **Accessories**

The optiPoint family's innovative adapter and add-on device concept makes it possible to react to changing workplace requirements without replacing the endpoint. Frequent conference requirements, for example, can be met by using the optiPoint acoustic adapter, with an external microphone and loudspeaker. Additional function keys are also supported on the optiPoint 410/420 standard S and optiPoint 410/420 advance S, up to two add-on modules can be connected.



# **Technical data**

# Supported standards and target system

In addition to the RFC 3261, the telephones comply with a whole range of SIP and IP standards. For further details, please contact your local sales representative.

In addition to the standard IETF-based features, these telephones also support features for use with the Siemens Real Time System HiPath 8000 and the Siemens SURPASS Hosted Office, as well as others for the application servers BroadSoft BroadWorks and Sylantro. For other target systems, a more detailed analysis (in terms of implemented standards) or appropriate tests are recommended.





# **Overview of Features**

### Hardware

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Display	No	2 lines (2 x 24 characters)	2 lines (2 x 24 characters)	2 lines, backlit (2 x 24 characters)	4 lines, backlit (4 x 24 characters)
Function keys, programmable	and with adYescent LI	EDs (status lights)			
optiPoint 410 S	8 keys	12 keys	12 keys	12 keys	19 keys
optiPoint 420 S	-	12 keys with self- labeling function	12 keys with self- labeling function	12 keys with self- labeling function	18 keys with self- labeling function
Dialog keys	_	3	3	3	3
Volume setting adjustment keys (plus, minus)	Yes	Yes	Yes Yes		Yes
Wall mountable (without sidecar and optional bay support)	Yes	Yes	Yes	Yes	Yes
Dimensions (height x width x l	ength [mm])				
optiPoint 410 S	64 x 160 x 220	69 x 215 x 220	69 x 215 x 220	69 x 215 x 220	72 x 215 x 220
optiPoint 420 S	_	79 x 225 x 220	79 x 225 x 220	79 x 225 x 220	82 x 225 x 220
Weight [kg]					
optiPoint 410 S	0.606	0.813	0.813	0.837	0.862
optiPoint 420 S	_	0.866	0.873	0.899	0.916
Storage conditions		DIN IEC 721-3-3/ [	OIN EN 60721-3-3 and	ETS 300 019-2-3	
Operating conditions	DIN IE	C 721-3-1 and -3-2/ [	IN EN 60721-3-1 and	l -3-2 and ETS 300 01	9-2-1

### Certification

410	410/420	410/420	410/420	410/420
entry S	economy S	economy plus S	standard S	advance S
CE label, Underwriters Commission (FCC) Par Electromagnetic Comp requirements EN 60 9	t 68 (CFR 47), Federa patibility (EMC) (EN 5	al Communications Co	ommission (FCC) Part	

# **Acoustic Features and Audio Support**

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
G.711 (64 kbit/s a/μ law)	Yes	Yes	Yes	Yes	Yes
G.722 (64 kbit/s), wide band codec	Yes	Yes	Yes	Yes	Yes
G.723.1 (6.3 kbit/s)	Yes	Yes	Yes	Yes	Yes
G.729 A/B (8 kbit/s)	Yes	Yes Yes Yes		Yes	
Open listening	No	Yes	Yes	Yes	Yes
Full duplex hands-free speaker phone	No	No	No	Yes	Yes
G.711, G.729AB Silence suppression (VAD)	Yes	Yes	Yes	Yes	Yes
Ringer Off	Yes	Yes	Yes	Yes	Yes
Echo canceling for local echo (AEC) full duplex	No	No	No	Yes	Yes
Configurable Jitter Buffer	Yes	Yes	Yes	Yes	Yes
Room Character Configuration	No	No	No	Yes	Yes

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Selectable Packet Size (10 ms / 20 ms)	Yes	Yes	Yes	Yes	Yes
MFV (in-band)	Yes	Yes	Yes	Yes	Yes
MFV (RFC 2833)	Yes	Yes	Yes	Yes	Yes

## Network

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
DHCP (IP address, subnet mask, DLS address, FTP address, option 120)	Yes	Yes	Yes	Yes	Yes
DNS names for phones	Yes	Yes	Yes	Yes	Yes
IEEE802.1p/q (VLAN tagging and prioritization) VLAN ID, manually or DHCP option 43	Yes	Yes	Yes	Yes	Yes
QoS (DIFFSERV and IEEE802.1p/q)	Yes	Yes	Yes	Yes	Yes
10/100 Base T interface, auto sensing, duplex and half-duplex	Yes	Yes	Yes	Yes	Yes
PC connection via built in switch	No	No	Yes	Yes	Yes
RJ45 Jack	1	1	2 (phone/PC)	2 (phone/PC)	2 (phone/PC)
Headset port 121 TR9-5/Polaris	No	No	Yes	Yes	Yes
USB master port	No	No	No	No	Yes
SNMP (MIB II supported)	Yes	Yes	Yes	Yes	Yes
Support of QDC	Yes	Yes	Yes	Yes	Yes
Failover/Redundancy					
DNS SRV	Yes	Yes	Yes	Yes	Yes
Registration with backup proxy	Yes	Yes	Yes	Yes	Yes
NAT		Via A	pplication Layer Gate	eways	•

# **Power Supply**

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
External power supply unit (EU, US or UK variants)	Yes	Yes			Yes
Power over LAN: IEEE 802.3af	Yes	Yes	Yes	Yes	Yes
Power over LAN according to Cisco (no CDP)	Yes	Yes	Yes	Yes	Yes
PoL class	Class 0 (0.44 W – 12.95 W)	Class 1 (0.44 W – 3.84 W)	Class 1 (0.44 W – 3.84 W)	Class 2 (3.84 W - 6.49 W)	Class 2 (3.84 W - 6.49 W)

# Modularity (Module/Adapter Support)

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
option bays (for adapter plug-in)	No	No	No	Yes 2 bays	Yes 1 bay
Acoustic adapter	No	No	No	Yes	Yes 1 slot
Recorder adapter	No	No	No	Yes	Yes
Support of optiPoint key module, max. two modules per phone	No	No	No	410 S: Yes	410 S: Yes

	410	410/420	410/420	410/420	410/420
	entry S	economy S	economy plus S	standard S	advance S
Support of optiPoint self- labeling key module, max. two modules (note: No mixed configuration supported)	No	No	No	Yes	Yes

# Administration

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Remote administration via DLS (using HTTP/S)	Yes	Yes	Yes	Yes	Yes
Administration via local interface (password-prtected)	Yes	Yes	Yes	Yes	Yes
Remote administration via Web interface for user and administration configuration items (using HTTP/S, password-protected)	Yes	Yes	Yes	Yes	Yes
Feature enable/disable via administration (password-protected)	Yes	Yes	Yes	Yes	Yes
Software download via FTP	Yes	Yes	Yes	Yes	Yes
Plug & Play-Registration  • Assignment using the MAC address  • Assignment using E.164	Yes No	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Support of BroadSoft Centralized Configuration Management (using XML/ HTTPS)	Yes	Yes	Yes	Yes	Yes

Security

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
SIP over TLS connection	Yes	Yes	Yes	Yes	Yes
RTP encryption enabled (e.g. SRTP)	Yes	Yes	Yes	Yes	Yes
TLS on Web Server I/F (i.e. HTTP/S)	Yes	Yes	Yes Yes		Yes
Default Phone Certificate Provided	Yes	Yes	Yes	Yes	Yes
802.1x supplicant support, with EAP-TLS	Yes	Yes	Yes	Yes	Yes
Operating System hardening	Yes	Yes	Yes	Yes	Yes
Payload (voice) encryption with SRTP	Yes	Yes	Yes	Yes	Yes
Support of digital certificates (X.509 V3)	Yes	Yes	Yes	Yes	Yes
Secure protocols for administration and management Note: not LDAP/s, secure FTP, SNMP V3	Yes	Yes	Yes	Yes	Yes

## **Common Telephony Features**

	410	410/420	410/420	410/420	410/420
	entry S	economy S	economy plus S	standard S	advance S
Distinctive Ringing	Yes	Yes	Yes	Yes	Yes
Call Hold	No	Yes	Yes	Yes	Yes
Consultation	No	Yes	Yes	Yes	Yes
Alternate	No	Yes	Yes	Yes	Yes
Call Deflection	No	Yes	Yes	Yes	Yes
Call Waiting	No	Yes	Yes	Yes	Yes
Call Decline/Refuse	No	Yes	Yes	Yes	Yes
Call Forward (unconditional, no reply, busy)	Yes	Yes	Yes	Yes	Yes
Call Transfer (unattended - blind transfer, attended - join)	No	Yes	Yes	Yes	Yes
Call Transfer Unscreened (Transfer on Ring)	No	Yes	Yes	Yes	Yes
Local 3-way conference	No	No	Yes	Yes	Yes
Mute	Yes	Yes	Yes	Yes	Yes
Music on hold (endpoint generated music)	Yes	Yes	Yes	Yes	Yes
Call log 2/4 line display - last 20 calls in categories: dialed, missed, forwarded, received	No	Yes	Yes	Yes	Yes
Repeat Dial (20 entries)	No	Yes	Yes	Yes	Yes
Abbreviate Dialing (12 destinations)	Yes	Yes	Yes	Yes	Yes
On-Hook Dialing	Yes	Yes	Yes	Yes	Yes
Name/URL Dialing	No	Yes	Yes	Yes	Yes
Emergency Calling	Yes	Yes	Yes	Yes	Yes
Direct Mode / IP Dialing	No	No	No	No	No
Hot Line / Warm Line	Yes	Yes	Yes	Yes	Yes
Message Waiting Indication (Message Waiting displayed in idle menu)	No	Yes	Yes	Yes	Yes
Phone lock:	Yes	Yes	Yes	Yes	Yes
Forwarding of calls when phone is locked (phone-lock forward)	Yes	Yes	Yes	Yes	Yes
Use of "emergency" numbers when locked	Yes	Yes	Yes	Yes	Yes
Auto Dialing, after 6 seconds (configurable)	Yes	Yes	Yes	Yes	Yes
Repertory Dialing	Yes	Yes	Yes	Yes	Yes
"On-Hook" - to bring the phone in idle state	Yes	Yes	Yes	Yes	Yes
"Off-Hook" - to bring the phone out of setup and enable dialing	No	Yes	Yes	Yes	Yes
Hot Keypad dialing	Yes	Yes	Yes	Yes	Yes
Enabling/disabling dialing type (Name, Number)	Yes	Yes	Yes	Yes	Yes
Initial digit timeout after going "Off-Hook"	No	Yes	Yes	Yes	Yes
Local dial plan	Yes	Yes	Yes	Yes	Yes
Languages support: Dutch, English (US), French, German, Italian, Portuguese, Spanish	Not applicable	Yes	Yes	Yes	Yes

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Supported Country settings: Argentina, Austria, Australia, Belgium, Brazil, China, Czech Republic, Denmark, Finland, France, Germany, Hungary, India, Italy, Luxembourg, Mexico, Netherlands, New Zealand, Poland, Portugal, Republic South Africa, Singapore, Spain, Switzerland, Thailand, United Kingdom, United States	Yes	Yes	Yes	Yes	Yes
Dynamic WBM addressing	Yes	Yes	Yes	Yes	Yes

# Telephony Features for HiPath 8000

Multiple Line Appearances and Associated Features	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Line Reservation	Yes	Yes	Yes	Yes	Yes
Audible Ringing on Rollover Lines:  Beep Alert Ringing No Ringing Standard Ringing Note: Capability to play a Standard Ringing tone while the user is active on the telephone)	Yes	Yes	Yes	Yes	Yes
Outgoing Line Preferences:  Idle Primary Last No Line (user must press the line to use - not automatic)	Yes	Yes	Yes	Yes	Yes
Terminating Line Preferences:  Ringing Line Ringing Prime Line Preferred Incoming Line Incoming Prime Line Preferred None (a line key must be pressed to answer a call)	Yes	Yes	Yes	Yes	Yes
Indication of Unconditional Call Forwarding)	Yes	Yes	Yes	Yes	Yes
Line Key Action Mode Hold or Release	Yes	Yes	Yes	Yes	Yes
Hotline/Warmline Working	Yes	Yes	Yes	Yes	Yes
Number of lines with Multiple Line Appearances	6	6	10	10	10
Direct Station Selection(DSS)	No	Yes (5 Key)	Yes (9 Key)	Yes (9 Key)	Yes (9 Key)

# Further Features for HiPath 8000

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
User Mobility Login/Logoff Funktion via Feature Key and via optiGuide	No	Yes	Yes	Yes	Yes
Hot Desking Feature Key	No	Yes	Yes	Yes	Yes
Automatic Call Back on Busy between HiPath 8000 end points	No	Yes	Yes	Yes	Yes
<b>Note:</b> Implemented via use of feature codes - it is not a SIP service)					
Group Call Pickup (HP 8000)	No	Yes	Yes	Yes	Yes

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Feature key toggle (HiPath 8000)	No	Yes	Yes	Yes	Yes
3PCC (Third-Party Call Control)	Yes	Yes	Yes	Yes	Yes
Calling/called/connected party display	No	Yes	Yes	Yes	Yes

# **Telephony Features for BroadSoft**

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Shared Call Appearance	Yes	Yes	Yes	Yes	Yes
3PCC (Third-Party Call Control)	No	Yes	Yes	Yes	Yes
Calling/called/party display	No	Yes	Yes	Yes	Yes

# **Telephony Features for Sylantro**

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Call Park / Pickup	No	Yes	Yes	Yes	Yes
Group Call Pickup	No	Yes	Yes	Yes	Yes
Bridged/Shared Line Appearance	Yes	Yes	Yes	Yes	Yes
Central Conferencing	No	Yes	Yes	Yes	Yes
Calling/called/connected party display	No	Yes	Yes	Yes	Yes

# Telephony Features for SURPASS Hosted Office

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Group Call Pickup	No	Yes	Yes	Yes	Yes
3PCC (Third-Party Call Control)	Yes	Yes	Yes	Yes	Yes
Calling/called/connected party display	No	Yes	Yes	Yes	Yes

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