






We change the shape of the world

Feature List	NovaTec SIP Gateway / NovaTec Internet Pathfinder
---------------------	--

Models	NovaTec S5+ 	NovaTec S6 	NovaTec S20 / S20+ 
Width x Depth x Height	19" chassis: 480 x 220 x 60 mm Desktop or wall-mounted chassis: 360 x 220 x 60 mm	19" chassis: 480 x 220 x 135 mm	19" chassis: 480 x 235 x 265 mm
Weight	2 up to 4 kg	7 up to 10 kg	7 up to 15.8 kg
Input power supply	100 – 240 V~	100 – 240 V~	230 V~ (115 V~) ±10%
Max. number of PRI (E1) interfaces, non-blocking			
CCU3	4	4	4 / 12*
CCU4	6	6	6 / 18*
Multiple PRI (E1) connection, blocking			
CCU3	Yes	Yes	Yes
Max. number of BRI (S/T) interfaces, non-blocking			
CCU3:	8	30 (without in-band tones) 28 (with in-band tones)	30 / 90* (without in-band tones) 28 / 84* (with in-band tones)
CCU4	20	56 (with in-band tones)	64 / 168* (with in-band tones)
Max. number of BRI (S/T) interfaces, blocking			
CCU3:	8	44	100 / 132*
Max. number of U₀ interfaces (ULU), non-blocking			
CCU3:	0	12	30 / 36* (without in-band tones) 28 / 36* (with in-band tones)
CCU4:	4	16	56 / 48* (with in-band tones)
Max. number of U₀ interfaces (ULU), blocking			
CCU3:	0	12	48 / 36*
Max. number of U_{po}/U_{ko} interfaces, non-blocking			
CCU3:	8	30 (without in-band tones) 28 (with in-band tones)	30 / 90* (without in-band tones) 28 / 84* (with in-band tones)
CCU4:	20	56 (with in-band tones)	64 / 168* (with in-band tones)
Max. number of U_{po}/U_{ko} interfaces, blocking			
CCU3:	8	44	100 / 132*
Analogue subscriber line according to ITU-T G.712 and Q.552 – non-blocking			
CCU3:	8	44	60 / 132* (without in-band tones) 56 / 132* (with in-band tones)
CCU4:	20	56	128 / 168* (with in-band tones)
Analogue subscriber line according to ITU-T G.712 and Q.552 – blocking			
CCU3:	8	44	196 / 132*
Max. number of media converter for VoIP			
CCU3:	32	128	196 / 384*
CCU4:	128	128	128
Transparent ISDN over IP			
CCU3:	Yes	Yes	Yes
CCU4:	No	No	No
SIP trunking with Cisco Call Manager (from release 7.1.2 on also for data applications) SIP trunking with Cisco ISR for data applications as of IOS 12.4T			
	Yes	Yes	Yes



We change the shape of the world

Models	NovaTec S5+	NovaTec S6	NovaTec S20 / S20+
SIP (Session Initiation Protocol) <ul style="list-style-type: none"> • RFC 3261 (UDP, TCP-IP support) • Digest Authentication (RFC2617) • Reliability of provisional responses (RFC3262) • Offer/answer (RFC3264) • STUN client and server (NAT traversal RFC3489) • Firewall NAT routing (fixed tables) • In-Band/Out-of-Band DTMF (RFC2833) • Session timer (RFC4028) • SIP Extensions for Caller Identity and Privacy • SIP media inactivity Timer • ITU-T T.38 fax • E164 (RFC3824) • DNS name resolution (RFC 1034, 1035) • ENUM (RFC 3761) • HTTP(S) Server for diagnostics, statistics and trace (HTTPS is only supported in connection with NAMES) SIP Call Features <ul style="list-style-type: none"> • Hold • Call Transfer • Music on Hold • ISDN Calling Name • 3PTY Security <ul style="list-style-type: none"> • sRTP for speech and data (RFC3711) • sRTP Fallback to RTP and RTP to sRTP (configurable) • X509v3 certificates can be loaded, created (RFC 5280) 	Yes	Yes	Yes
Connection to SMS center via SMPP CCU3: CCU4:	Yes No	Yes No	Yes No
Budget assignment per user with user blockage when budget is spent CCU3: CCU4:	Yes No	Yes No	Yes No
E-Mail message incl. CLIP information in case of no answer on the mobile, fixed-line or IP phone (direct response or callback possible) CCU3: CCU4:	Yes No	Yes No	Yes No
Offer/answer model with Session Description Protocol (SDP)	Yes	Yes	Yes
Proxy usage (outgoing call)	Yes	Yes	Yes
Remote configuration via IP & ISDN CCU3: CCU4:	Yes Only IP	Yes Only IP	Yes Only IP
Hold and off hold & call transfer	Yes	Yes	Yes
Forwarding: forward on busy, unconditional forward and forward on no answer	Yes	Yes	Yes
Parallel and serial forking	Yes	Yes	Yes
Re-INVITE: codec change, hold, off hold, session timer	Yes	Yes	Yes



We change the shape of the world

Models	NovaTec S5+	NovaTec S6	NovaTec S20 / S20+
Supported header field "Supported"	Yes	Yes	Yes
Number Mapping	Yes	Yes	Yes
Common DDI for mobile, fixed-line and IP phone	Yes	Yes	Yes
ISDN cause codes in call detail records	Yes	Yes	Yes
SIP cause codes in call detail records	Yes	Yes	Yes
T.38-Fax Fax over IP according to ITU-T recommendation T.38 and Annex D CCU3: CCU4:	Yes No	Yes No	Yes No
Codec and Speech Compression <ul style="list-style-type: none"> • G.711 incl. Annex I (BFI) and Annex II (VAD/CNG) aLaw & uLaw • G.726 incl. VAD/CNG, BFI Error Concealment and Payload Support RTP according to "RFC 3551" • G.728, 16 kbit/s (only CCU3) • G.729 A/B, 8 kbit/s • Fax Relay, T.38 Support V.21, V.27ter, V.29 and V.17 (only CCU3) • 30 ms Voice Packet Size (all Codecs, upstream) • CCU3: Adaptive/fix Jitter Buffer max. 200 msec • CCU4: Adaptive Jitter Buffer max. 180 msec, fix Jitter Buffer max. 300 msec • Jitter Buffer Inband Modem Support • RTP/sRTP protocol support according to RFC3550 and RFC3711 • Payload Byte Counter (H248.1 Annex E) • X-CCD & Clear Mode for data transmission. • Silence Compression • Comfort Noice Generation 	Yes	Yes	Yes
Analogue Signalling <ul style="list-style-type: none"> • The Near Line Echo Canceller (16 msec) is compatible with the available ITU-T G.165 and G.168 standards • Caller ID Sender (CIDS), V.23 and Bel202 • Caller ID Receiver (CIDR), V.23 and Bel202 • DTMF/AT Generator • DTMF Receiver (DTMFR)) according to ITU-T Q.23 • Universal Tone Generator (UTG) • Universal Tone Detector (UTD) according to ITU-T V.8 • Text Phone V.18 A Detector • Call Progress Tone Detector (CPTD) • Answering Tone Detector (ATD) • Digital Identification Signal (DIS) V.21 Detector • DTMF Event Support according to RFC2833 	Yes	Yes	Yes
VLAN (Virtual LAN) according to 802.1Q	Yes	Yes	Yes
MD5 authentication	Yes	Yes	Yes
NAT mapping tables	Yes	Yes	Yes
STUN Server / Client	Yes	Yes	Yes
HTTP diagnostics interface	Yes	Yes	Yes
User accounting	Yes	Yes	Yes
Remote maintenance & diagnostics	Yes	Yes	Yes
Local time from ISDN	Yes	Yes	Yes



We change the shape of the world

Models	NovaTec S5+	NovaTec S6	NovaTec S20 / S20+
NTP: UTC Server access for automatic time setting	Yes	Yes	Yes
Summer / winter time	Yes	Yes	Yes
Static IP / Dynamic IP	Yes	Yes	Yes
Basic & supplementary call set up	Yes	Yes	Yes
Session timer as described in the IETF Internet Draft <i>ietf sip session timer-04.txt</i>	Yes	Yes	Yes
Public and private IP address support for use with NAT firewalls	Yes	Yes	Yes
Configurable SIP and RTP/RTCP ports	Yes	Yes	Yes
Encryption (SRTP) AES 128 Key (activation through NovaTec necessary)	Yes	Yes	Yes
Encryption (TLS): (activation through NovaTec necessary) <ul style="list-style-type: none"> • TLS1.0 / SSL3.0 according to RFC2246 • RC2, RC4 DES and AES according to RFC3268 • X509v3 certificates according to RFC3647 • RSA key exchange for asymmetric crypto system 	Yes	Yes	Yes
SNMP <ul style="list-style-type: none"> • Presently SNMP-V1 and SNMP-V2C without traps is supported. • SNMP Mapper additionally supports SNMP-V3 and V3-Traps. 	Yes	Yes	Yes
Ethernet 802.3 CCU3: 10 BASE-T & 100 BASE-TX CCU4: 10 BASE-T, 100 BASE-TX & 1000 BASE-TX	Yes Yes	Yes Yes	Yes Yes
Ethernet half duplex	Yes	Yes	Yes
Ethernet full duplex	Yes	Yes	Yes
GPS receiver for synchronisation CCU3: CCU4:	Optional No	Optional No	Optional No
Synchronisation via RMCS	Optional	Optional	Optional
RMCS server functionality	Optional	Optional	Optional

*only S20+ (3x S6 backplane)