



**Technical Datasheet:
NovaTec S3 / Cisco VG-2BRI**



Mechanical Data	
Width x Depth x Height	Desktop / wall-mounted chassis: 211 mm x 155 mm x 40 mm
Weight	1 to 2 kg (depending on version)
Fastening method	Wall-mounted chassis: wall holders
Construction	Several options
Electrical Data	
Power Supply	90 to 264 V~ ; 47 to 63 Hz
Power Input	Max. 1 A at 230 V~
Electrical Supply	Rubber connector (IEC 320)
Overvoltage Protection	Internal overvoltage protection
Available Interfaces (depending on version)	<ul style="list-style-type: none"> • Serial via USB • 1 x Ethernet according IEEE 802.3/802.3u • ISDN BRI, EDSS1 • ISDN U_{P0}, EDSS1* • Analogue*
BRI Interface	<ul style="list-style-type: none"> • According CTR 3, TBR 3, ITAAB • Supply: external with USS (feeding unit) • Range: max. 220 m (passive bus) max. 900 m (extended passive bus) max. 1000 m (point-to-point)
Analogue Interface*	<ul style="list-style-type: none"> • Automatic identification between IWV and MFV (ETSI Standards ETSI ES 201 235-1,2 V1.1.1) • Range up to 10,000 m (depending on cable type) • High ringing voltage with up to 5 US REN (Ringer Equivalent Number) according AT&T / 125 V Peak ringing voltage and protection from temperature rise • Adjustment of the line impedance for 15 countries (Austria, ..., Germany, ..., USA) • Caller ID after Bellcore/Telcordia GR-30-CORE <u>Bell202 FSK</u> CID Coding and ETSI 300-659-1/2/3 V1.3.1 <u>V.23 FSK</u> Coding for transmission of CID • Call charge pulse is 12/16 kHz configurable • Modem standards up to V.90 • Fax standards up to V.34 • Fax/Modem/Speech identification (Fax/Modem Switch)
IP Interface	<ul style="list-style-type: none"> • SIP 2.0 → RFC3261 • ITU V.110 → Data interface between ISDN, IP • TLS and sRTP • Option: GPS receiver for synchronisation*
Encryption	<ul style="list-style-type: none"> • SRTP according RFC3711 and RFC4711 (AES-CM-128 / HMAC-SHA1-32) • TLS Version 1.0 according RFC2246 and RFC3268 Key Agreement: RSA and Diffie Hellmann Cipher Suite: AES, DES and 3DES Certificate: X509v3 Hash Functions : SHA and MD5



Electrical Data	
Clock Accuracy	<p>Clock accuracy without GPS synchronisation:</p> <ul style="list-style-type: none"> • Worst Case: +/- 30 ppm • Temp. Drift: +/- 30 ppm at -0°C to +70°C • Pull Range: +/- 100 ppm <p>Clock accuracy with GPS synchronisation or RMCS option**:</p> <ul style="list-style-type: none"> • Long period (2 days) measurement: +/- 0.5 ppm (5 * 10⁻⁷) • Measured maximum short time variations caused by the GPS receiver: +/- 2 ppm (2 * 10⁻⁶) • Worst Case and guaranteed: +/- 5 ppm (5 * 10⁻⁶)
Codec and Speech Compression	<ul style="list-style-type: none"> • G.711 incl. Annex I (BFI) and Annex II (VAD/CNG) • G.726 incl. VAD/CNG, BFI error concealment and payload support RTP according "RFC 3551" • G.728, 16 kbit/s • G.729 A/B, 8 kbit/s • Fax Relay, T.38 support V.21, V.27ter, V.29 and V.17 • 30 ms Voice Packet size (all Codecs, upstream) • Adaptive/ Fixed Jitter Buffer maximal 200 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 Noise Generation
Analogue Signalling	<ul style="list-style-type: none"> • The Near Line Echo Canceller (16 msec) is compatible with applicable 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
Environmental Specifications	
Storage and Transport	-20° C to +90° C 0% to 95% relative humidity (not condensing)
Operation	+5° C to +40° C 0% to 95% relative humidity (not condensing)
Heat Loss	30 J
Max./Min. Temperature	0 to 40° C

*Not available with TransNova® S3 (Cisco VG-2BRI)

**The same values apply for the NovaTec S3 version 1F8000-R (Cisco VG-2BRI-R) which can be synchronized via the RMCS server or can act as RMCS server.