



CONNECTION SPECIFICATIONS

ISDN	4 x BRI (S0) RJ-45; 0, 1, or 2 BRI TE; 4, 3, or 2 BRI NT
VoIP	8 x VoIP channels
Ethernet	2 x Ethernet 10/100 Base-T RJ45
Maintenance	Remote access via IP or ISDN with <i>TELES GATE Manager</i> , <i>TELES.NMS</i> , HTML, or FTP
Power supply	Power supply unit 230VAC/12VDC, 1000mA

PROTOCOLS AND FEATURES

ISDN	DSS1 (Q.931), Q.SIG-BC; PP or PMP
VoIP	SIP (RFC 3261), H.323(v4) VoIP/Media gateway functionality STUN client Support for multiple gatekeepers, H.225(v4) Support for multiple registrars RTP multiplex bandwidth reduction ENUM client Echo cancellation G.168–2000 Silence suppression Comfort noise generation Ring tone generation Configurable ToS, Diffserv SIP registrar / location server
Codecs	G.711, G.723, G.726, G.728, G.729, GSM, iLBC, Fax T.38
DSL	Integrated DSL router PPoE, PPTP
SNTP	Version 2 (mandatory for correct data/time generation)
SNMP	Alarm management
System	Firmware & configuration remotely upgradeable

IP SECURITY

Firewall	IP, MAC, UDP, and TCP filter
Telnet, FTP, HTTP	Username and password
Remote access	Username and password

ROUTING

- 5000 routing entries
- Time-dependent routing
- Multilevel alternative routing
- Multiple VoIP routing profiles
- Call-by-call
- Preselection
- AOC generation (AOC-D, AOC-E)

ROUTING (cont'd)

- Dynamic PSTN fallback (IntraSTAR® patent)
- Traffic shaping

QoS alternative routing:

Quality criteria for disabling VoIP peer for a defined amount of time:

- ASR
- Round trip delay
- Jitter
- Fraction lost

After the defined time expires the default VoIP peer is active again.

REQUIRED BANDWIDTH

Table shows required bandwidth for pure voice data, including IP, UDP, RTP header (40Byte/Package), except silence suppression

Codec	Framesize	RTP Multiplexing	1 Call (kbit/s)	4 Calls (kbit/s)	8 Calls (kbit/s)
G.729	20ms		24.0	96.0	192.0
G.729	80ms		12.0	48.0	96.0
G.729	20ms	X	20.4	44.4	68.4
G.729	80ms	X	11.1	35.1	59.1
G.711	20ms		80.0	320.0	640.0
G.711	80ms		68.0	272.0	544.0
G.711	20ms	X	76.4	268.4	524.4
G.711	80ms	X	67.1	259.1	515.1

RTP multiplexing is compatible with TELES.VoIPBOX, TELES.VoIPGATE, TELES.iGATE, TELES.iSWITCH, or TELES.iXESS on the peer side.

SUPPLEMENTARY SERVICES

ISDN to ISDN	transparent
ISDN to SIP, SIP to ISDN	RFC 3398 RFC 3578, overlap sending/receiving
ISDN to H.323, H.323 to ISDN	CLIP, CLIR, COLP, COLR
To ISDN	AOC-D, AOC-E

DTMF INBAND HANDLING

ISDN to ISDN	transparent
ISDN to VoIP, VoIP to ISDN	RFC 2833, inband

OPERATOR DOCUMENTATION

DATA SHEET

HOUSING

Material	ABS, black
Status LED	4
Mounting	Desktop, wall

PHYSICAL PARAMETERS

Size (LxWxH)	142 x 138 x 38mm
Weight	approx. 300g

ENVIRONMENTAL CONDITIONS

Temperature	+5°C to +45°C
Humidity	5% to 80% (non-condensing)

CERTIFICATES

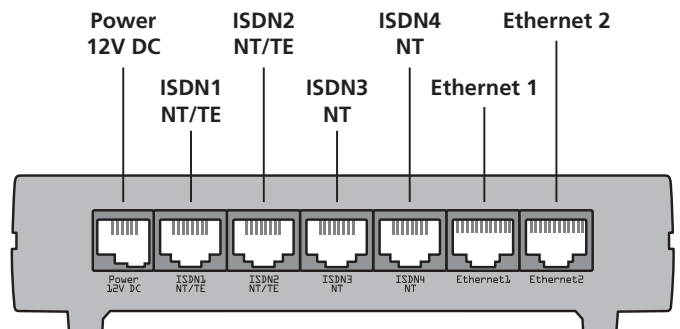
EMC, Safety, CE

PACKAGE CONTENT

- 1 TELES.VoIPBOX
- 1 Power supply unit
- 4 ISDN BRI (S0) cables, unshielded, 2 x RJ45 plugs, 1,5m
- 1 Ethernet cable Cat5, straight-through, 2 x RJ-45 plugs, 1,5m
- 1 Installation brochure
- 1 Drilling jig

CONFIGURATION & PROVISIONING (DEFAULT)

Protocol	Port 1, 2 : DSS1, TE, Point-to-Multipoint Port 3, 4 : DSS1, NT, Point-to-Multipoint
IP settings	IP address : 192.168.1.2 IP mask : 255.255.255.0
Routing (transparent)	Port 1, 2 -> Port 3, 4 and Port 3, 4 -> Port 1, 2



TELES AG
Communication Systems Division
Ernst-Reuter-Platz 8
10587 Berlin, Germany
Phone +49 30 399 28-066
Fax +49 30 399 28-051
E-mail sales@teles.com

www.teles.com/tcs

