

Vega 50 BRI



Vega 50 BRI features

- Desktop or 19" rack mount
- 4 ports (8 circuits)
- S/T physical interface
- NT / TE configurable
- Euro ISDN signaling

Vega general product features

- LCD display
- Web browser configuration
- 10 base T / 100 base TX LAN
- QOS packet marking
 - layer 3 Type Of Service
 - layer 2 802.1 p/q
- Call detail records available
 - from Telnet and Serial interfaces
 - via Radius accounting records
- Built in dial planner
- SNMP
- Auto-load config and firmware

Vega VoIP features

- Echo cancellation
 - G.168 – up to 32ms (R6 up to 128ms)
- Codecs / companders
 - G.711Alaw64k
 - G711ulaw64k
 - G729AnnexA (/b)
 - G.723.1
 - T.38
- Silence suppression configurable per codec

Environmental

- Operating temperature: 0°C to +40°C
- Storage temperature: -20°C to +70°C
- Humidity: 0 to 90% (non condensing)

Power

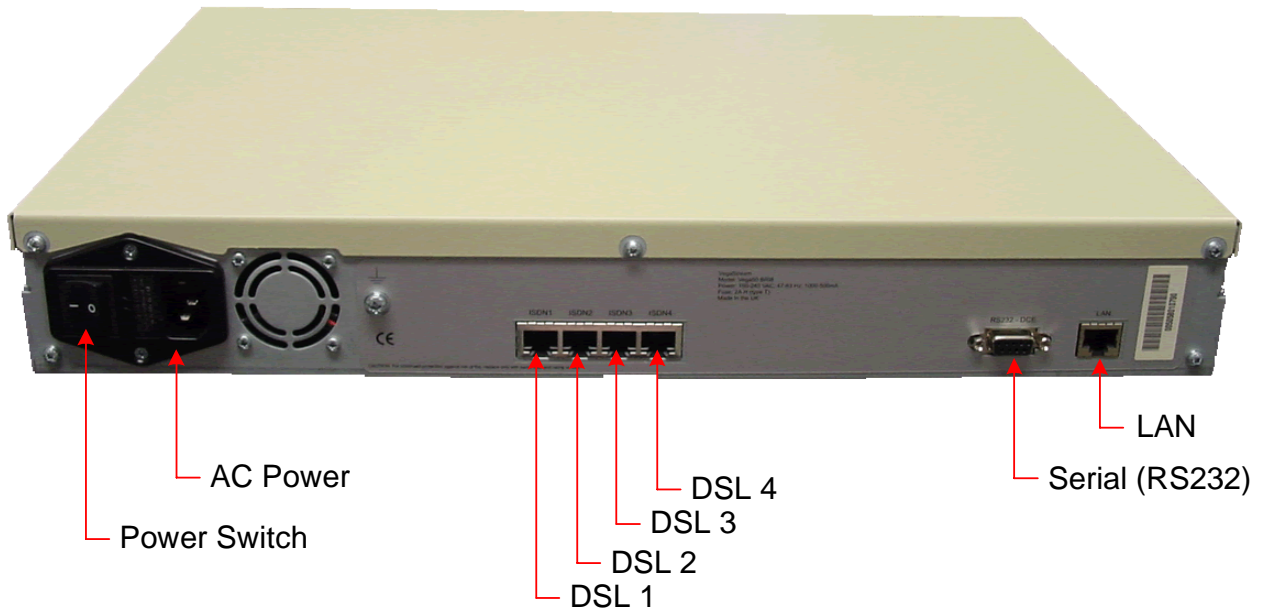
- 100 - 260 Vac, 47 - 63 Hz, 1A - 0.5A
- Fuse rating: 2A - type T (e.g. Bussmann S505)

Physical dimensions

- 440mm (17.4") x 63mm (2.5") x 330mm (13") width / height / depth
- Industrial rack mount: 483mm (19"), 1.5U
- Weight: 7.5kg



POTS LED Functions	LED Off	LED Flash	LED On
Vega 50 BR1	No physical connection	Physical only	Physical + layer 2



Vega 50 BRI

BRI Cables supplied

Blue booted ISDN cable

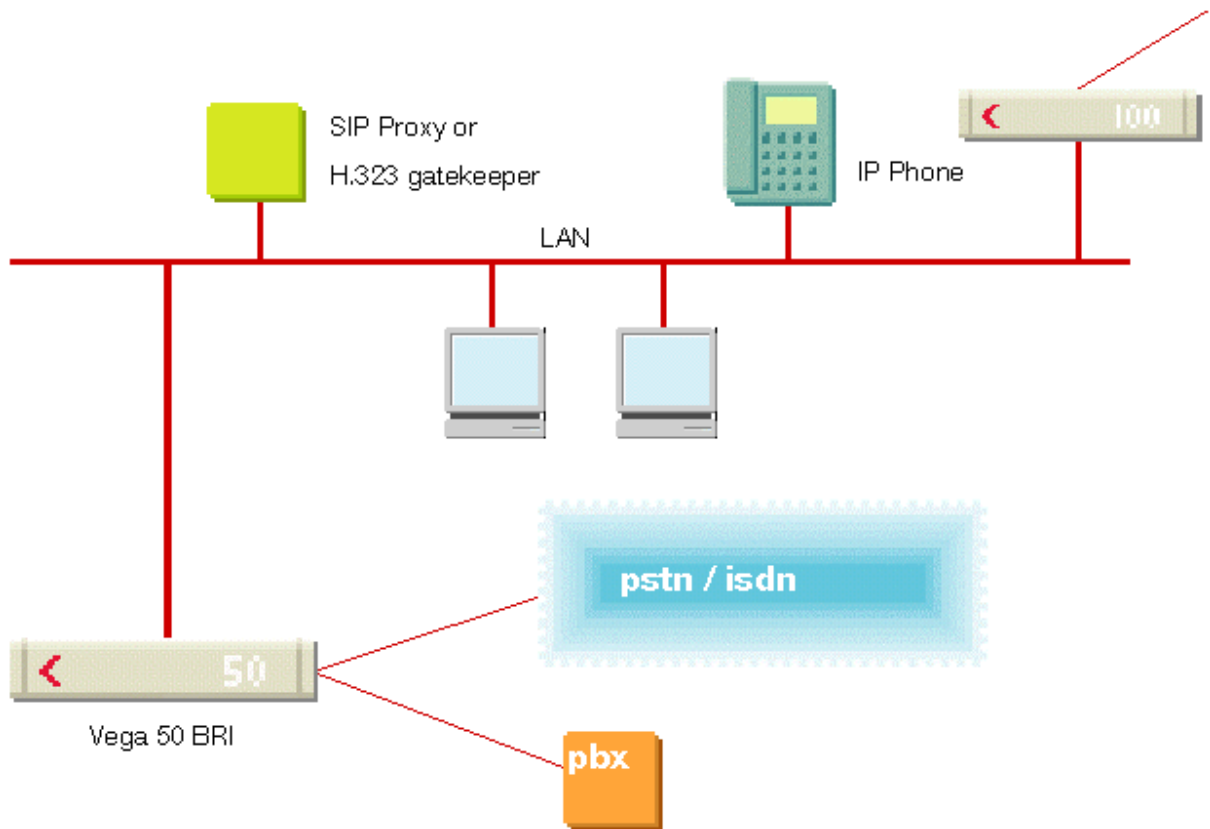
Red booted ISDN cable

- Vega TE → NT

- Vega NT → TE

Where cables are supplied with ferrites on one end - this end should be plugged into the Vega for it to meet EMC approvals

Typical configuration



Approvals

- Approved for European CE Countries
 - ISDN - TBR3 (Euro-ISDN)
 - Safety – EN60950, IEC60950
 - EMC – EN55022 class B (CISPR 22), EN55024(CISPR 24)
- Approved for Australia / New Zealand
 - Safety – AS/NZ60950
 - EMC – AS/NZS 3548
 - Telecomms – in progress
- Asia & N. America
 - Approvals not yet sought

Tech Spec

•DSL Physical

S/T bus connection requires an NT1

I.430 framing structure

2 bearer channels (64 kbps)

1 "D" channel (16 kbps)

TE / NT mode soft configurable by DSL - (requires different cables - supplied)

Line power not supplied (NT)

Line power not detected (TE)

•DSL Signalling

Euro-ISDN (DSS1/TBR3)

Supports point-to-point (static TEI) and
point-to-multipoint operation (automatic TEI)

Cable pinouts

Cables with RJ48 plugs are used to connect to the Vega 50 BRI's ISDN ports. The pinout of each Vega 50 BRI interface is hardwired as TE. A (BLUE) straight through cable is used to connect a TE Vega DSL to an NT far end device. A (RED) cross-over cable is used to connect an NT Vega DSL to a TE far end device.

Vega 50 BRI	Far end device	
TE (physical)	NT	TE
3 (Tx+)	3 (Rx+)	4 (Rx+)
6 (Tx-)	6 (Rx-)	5 (Rx-)
4 (Rx+)	4 (Tx+)	3 (Tx+)
5 (Rx-)	5 (Tx-)	6 (Tx-)

For Loopback between a Vega NT port and a Vega TE port, use the RED cable

Cables with RJ45 sockets are used to connect the Vega to a Ethernet LAN hub. A standard 1:1 cable is required.

Ethernet
1 (Tx+)
2 (Tx-)
3 (Rx+)
6 (Rx-)

To Make cables for Vegas use the following parts (or similar)

T1/E1 and BRI cable:

Component	Part number	Description	Manufacturer
Cable	Belden 9804	Cat 5 S-FTP 2 Twisted Pair Cable (UL2960)	Belden www.belden.com
RJ45 connector	Stewart 360808A217	RJ45 Screened plug	Stewart www.stewartconnector.com
RJ45 boot for TE	Stewart 361010SRX225A255	RJ45 UL approved blue strain relief boot	Stewart www.stewartconnector.com
RJ45 boot for NT	Stewart 361010SRX225A257	RJ45 UL approved red strain relief boot	Stewart www.stewartconnector.com

Note:

1. When connecting the cable to the RJ45 connector ensure that there is 360° contact between the cable's braided screen and the RJ45 screen.
2. Balanced connections should have their + and – sides in the same twisted pair

LAN cable:

Component	Part number	Description	Manufacturer
Cable	Belden 9804	Cat 5 S-FTP 2 Twisted Pair Cable (UL2960)	Belden www.belden.com
RJ45 connector	Stewart 360808A217	RJ45 Screened plug	Stewart www.stewartconnector.com
RJ45 boot	Stewart 361010SRX225A256	RJ45 UL approved yellow strain relief boot	Stewart www.stewartconnector.com
Ferrite	Stewart 28B0562-200	EMI suppression ferrite core (solid, loose)	Stewart www.stewartconnector.com
Heat-shrink sleeve	TAKBRO CPA-100-13/4	Adhesive heatshrink (13mm od, 3:1) black UL224, MIL-1-23053	TAKBRO www.takbro.co.uk

Note:

1. When connecting the cable to the RJ45 connector ensure that there is 360° contact between the cable's braided screen and the RJ45 screen.
2. EMI suppression ferrite is to be fitted within 2mm +/- 2mm of the RJ45 connector boot – on the end that connects to the Vega.

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