

# Vega 50 FXS



## Vega 50 FXS features

- Desktop or 19" rack mount
- 2 models,
  - 8 FXS ports or
  - 8 FXS ports plus 2 FXO ports
- Loop start signaling
- Line current reversal generation (answer and disconnect indication)
- Line current disconnect generation (disconnect indication) on 8 + 2 version
- FSK Caller ID (sdmf and mdmf)
- First 2 ports of FXS connect to FXO ports when unit is powered down
- FXO ports have configurable line impedance (8 + 2 version only)

## Vega general product features

- SIP or H.323 supported (choice by firmware download)
- 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
- SIP supports 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

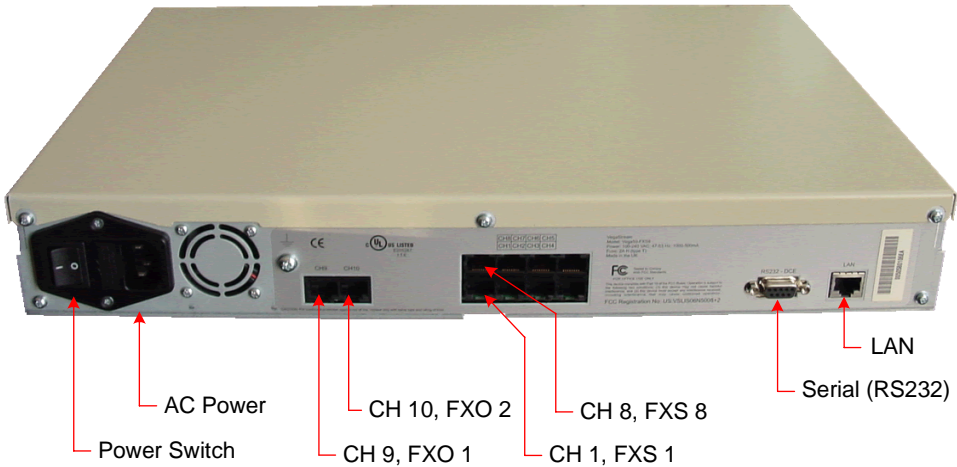
## Front view of Vega 50 FXS gateway



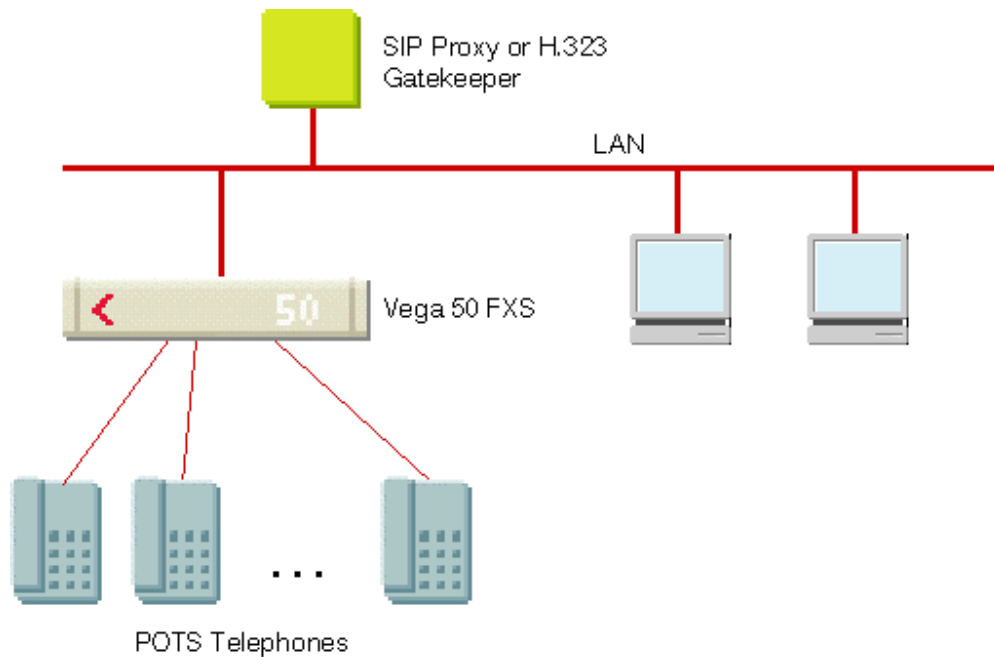
Rear view of 8 port gateway



Rear view of 8 FXS + 2 FXO port gateway



## Typical FXS configuration



## Approvals

- Approved for North America
  - Safety – UL60950
  - EMC – FCC part 15 class A
- Approved for European CE Countries
  - Safety – EN60950, IEC60950
  - EMC – EN55022 class A (CISPR22), EN55024(CISPR24)
- Approved for Australia / New Zealand
  - Safety – AS/NZ60950
  - EMC – AS/NZS 3548 Class A

## Tech Spec

- Physical FXS ports
  - Drives up to REN 3.0
  - Drive capability
    - 1km @ REN 3
    - 2.5km @ REN 2
    - 3km @ REN1
  - Line power supplied
- Signalling FXS ports
  - Loop start
  - DTMF dialling detection

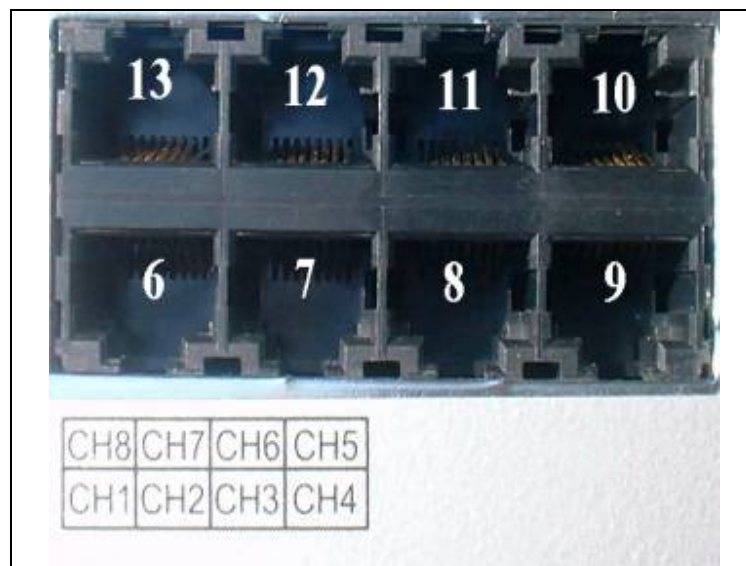
- Physical FXO ports  
600 R / CTR21 / 900R configurable  
REN 0.5
- Signalling FXO ports  
Loop start  
DTMF outdial  
Loop current disconnect clear-down  
Line current reversal

## Vega pinouts

The pinout of the Vega 50 is as follows:

Vega 50
4 (Ring)
5 (Tip)

The order of the telephone interfaces - looking from the rear of the Vega - is bottom left to top left anticlockwise, as shown below:



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 LAN cables for Vegas use the following parts (or similar):

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

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.