

SVEA II - Fixed line services via GSM

❖ SVEA II GSM Connector is a Fixed Cellular Terminal (FCT) that converts a mobile phone connection into a standard analogue telephone connection for voice, fax and data services.

SVEA II GSM Connector fulfils all requirements for fixed line such as: national, international and mobile calls, sending and receiving fax, data transmission and dial-up connection to Internet.

SVEA II gives you all the services which you know from the PSTN line, via GSM infrastructure, and at the same time in an intelligent way eliminates differences between GSM net and PSTN networks.

This is a nice plug & play solution, with built-in internal GSM antenna (with possibility to connect external antenna), built-in battery backup and external power supply. It can easily be wall mounted and requires only SIM card installation.

SVEA II, amongst others, includes an echo cancelling system for adaptation to different line impedance, a fixed dial system for minimising the waiting time when dialing out and support for GSM 850/900/1800/1900 technology. CDMA version is also available.

SVEA II has a MMS-remote management system, dedicated for Network Operators, to keep control of installed units in the field and receive alarms from them.



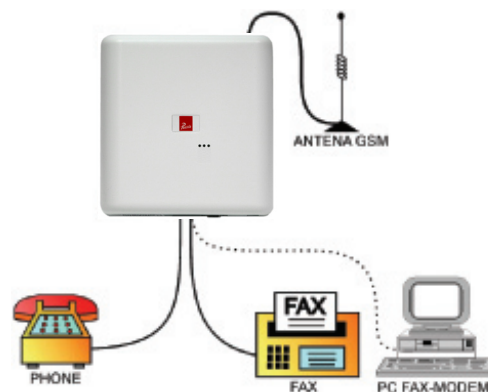
SVEA II – Features

❖ SVEA II as fixed line:

- Two independent lines:
 - a. RJ11 analogue port for ordinary phones
 - b. RJ11 analogue port for fax and data
- GPRS/EDGE and CSD support
- National alignments: tones, cadence, etc
- Data transmission services V.90 and V.92-optional (ISP/server mode), V.34
- FSK/CLIP presentation
- Intelligent Quick Dial System, which route the dialed number immediately through the GSM net at the last dialed digit
- Build in Echo cancellation system for adaptation to different line impedance
- Polarity reversal line when B-answer

❖ Additional Features:

- Easily programmable locally via PC and/or DTMF
- Protection system – 3 level security access system
- Remote Possio management system for configuration and service of all unit in the field
- Fraud protection and detection system
- Built-in GSM antenna, TNC plug for external antenna attachment
- PIN code management
- Service & Network operator SIM card lock system
- Built-in battery backup
- LED indicator for battery backup, line status and signal level





TECHNICAL SPECIFICATION

Description	Specifications
Physical dimensions (HxWxD)	210 x 200 x 55 mm
Weight (excl. power supply).	1385 g

ENVIRONMENTAL SPECIFICATION

Description	Specifications
Operating temperature	-10 C - +55 °C
Storage temperature	-20 C - +70 °C
Relative humidity	85 % non condensing

POWER SUPPLY SPECIFICATION

Description	Specifications
Type	Switch mode high efficiency type
Input AC	100-240V AC, 50/60Hz
Output VDC	18V DC
Output current	0,8 A
Weight	155 g

INTERNAL ANTENNA SPECIFICATION

Description	Specifications
Type of antenna	All around helical antenna
Frequency band	870-960/1710-1880 MHz
Impedance	50 ohm
Gain	3,5 dB
VSWR	< 2,0 (overall VSWR including interface path from MC75)
Power (min)	Up to 10W
Type of plug	Directly for TNC-Female
Other	Dedicated design – optimised for the SVEA II

PERFORMANCE SPECIFICATION

Description	Specifications
Voltage requirement	11,0 – 20 VDC
Current consumption	0.7 A @ 18.0 VDC maximum
Current consumption	
- Standby	80 –110 mA
- Line OFF hook	270 mA
- Line short circuit	300 mA
- Conversation	typical 350 mA – max. 400 mA @ 2W – 900 mHz / VSWR max 2,0
- GPRS class 10 – 2Tx / 3Rx	max. 485 mA @ 900 Mhz / VSWR max 2,0
- GPRS class 12 – 4Tx / 1Rx	max. 545 mA @ 900 Mhz / VSWR max 2,0
- EDGE class 12 – 4Tx / 1Rx	max. 550 mA @ 900 Mhz / VSWR max 2,0



www.possio.com

Telephone interface - Impedance - Hybrid - Echo cancellation - Nominal RX-level (line) - Nominal TX-level (line) - Line voltage - Ringing voltage - Ringing Cadence - Dialling system - Tone system	600 Ω W with adaptive system Adaptive hybrid system, with reflection attenuation > 30dB Fast 128 taps adaptive echo cancellation build-in -12 dBm +/- 5 dB -10 dBm +/- 5 dB 48Vdc / nominal 52 VDC +/- 4 V 48 Vrms +/- 8 V @ 25/50 Hz Fully programmable DTMF and/or Pulse dialling Fully programmable, single/dual tones with individual frequencies and individual cadences
---	---

MOBILE INTERFACE SPECIFICATION

Description	Specifications
Technology	Cinterion GSM Phase 2+ technology - Quad band: GSM 850/900/1800/1900MHz - GSM class small MS Output power (according to Release 99, V5) - Class 4 (+33dBm \pm 2dB) for EGSM850 - Class 4 (+33dBm \pm 2dB) for EGSM900 - Class 1 (+30dBm \pm 2dB) for GSM1800 - Class 1 (+30dBm \pm 2dB) for GSM1900 - Class E2 (+27dBm \pm 3dB) for GSM 850 8-PSK - Class E2 (+27dBm \pm 3dB) for GSM 900 8-PSK - Class E2 (+26dBm +3 /-4dB) for GSM 1800 8-PSK - Class E2 (+26dBm +3 /-4dB) for GSM 1900 8-PSK The values stated above are maximum limits. According to Release 99, Version 5, the maximum output power in a multi-slot configuration may be lower. The nominal reduction of maximum output power varies with the number of uplink timeslots used and amounts to 3.0dB for 2Tx, 4.8dB for 3Tx and 6.0dB for 4Tx.
Data transmission	GPRS • Multi-slot Class 12 • Full PBCCH support • Mobile Station Class B • Coding Scheme 1 – 4 EGPRS • Multi-slot Class 12 • Mobile Station Class B • Modulation and Coding Scheme MCS 1 – 9 CSD • V.110, RLP, non-transparent • 2.4, 4.8, 9.6, 14.4kbps • USSD
Fax transmission	Group 3; Class 1
Power of transmission	+22dBm / +33 dBm depending on the connection type
Sensitivity of receiver	@ BER Class II < 2.4% (static input level) GSM 850 min.: -102 dBm typical: -108 dBm E-GSM 900 min.: -102 dBm typical: -108 dBm GSM 1800 min.: -102 dBm typical: -107 dBm GSM 1900 min.: -102 dBm typical: -107 dBm
Speech Codec	ETS06.10/(ETS 06.10) (Full rate), ETS06.50/06.60/06.80 (Enhanced Full Rate), ETS06.20/(ETS 06.20) (Half Rate) and Adaptive Multi Rate AMR