

Voice Test Platform (VTP)



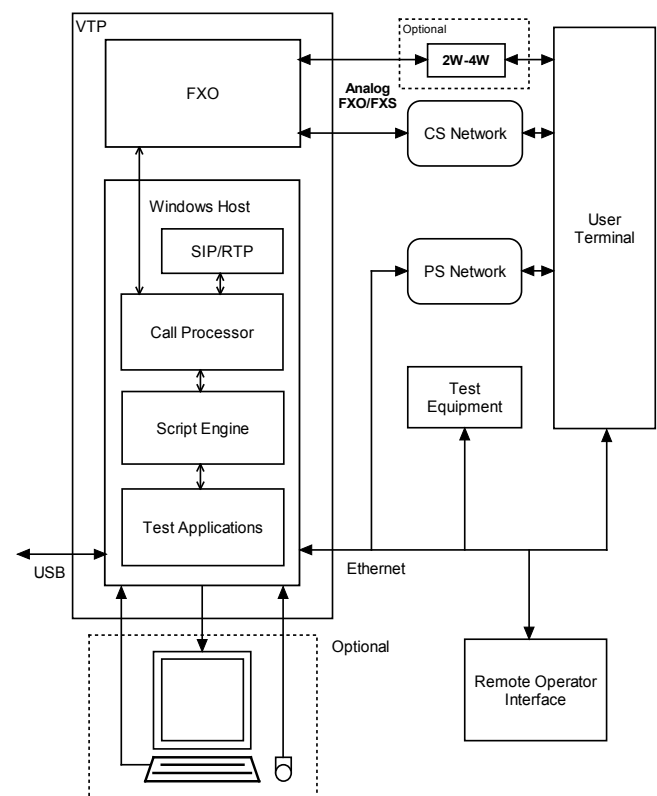
OVERVIEW

Square Peg Communications Inc.'s Voice Test Platform (VTP) is a generic PC-based test tool which tests the continuity and voice quality of Circuit Switched (CS) and Packet Switched (PS) voice calls. The VTP supports multiple analog and VoIP channels for voice call testing. These channels are highly configurable to provide fine control over call test scenarios. For analog calls, the VTP includes a full-featured multi-port FXO card. For packet-switched calls, the VTP includes a full-featured SIP stack providing a broad range of client and server features.

An embedded Python-based script engine in the VTP allows for automated, application-specific testing. Scripts are available for testing of SwiftBroadband Safety voice services, and the unit is supplied with a number of example scripts for making and receiving calls. A rich set of call processing APIs is included with the script engine, providing an easy path for creating custom test scripts.

A licensed Perceptual Objective Listening Quality Assessment (POLQA) algorithm is included to support automated analysis of voice quality. During a call, audio can optionally be transmitted from or recorded to file, and voice quality can be assessed using the POLQA algorithm to estimate Mean Opinion Score (MOS) for calls on any of the circuit or packet switched channels.

The VTP can be accessed locally or remotely via a Windows-based Operator Interface.



SPECIFICATIONS

FXO INTERFACE

Channels	0 – 16
Connector	RJ21 telco (RJ11 via breakout box)
Compression	μ -law A-law
Supervision	Ring detection, Loop disconnect, Reversal detection, Loop voltage, Loop current
Signaling Protocols	Off hook, Flash, DTMF, Pulse dial Bell 202 FSK Type 1 Protocol ITU-T V.23 FSK - British Telecom standard ITU-T V.23 FSK - General ETSI standard DTMF - General ETSI standard DTMF - Sweden/Finland variant DTMF - Denmark variant
Onhook Audio Detect 4-wire support	Caller ID, DTMF, Audio logging Via external 2-4 wire converters

VoIP INTERFACE

Channels	0 – 256
SIP Compliance	RFC 3261, RFC 3262, RFC 4028, RFC 3960, RFC 2976, RFC 2833, RFC 2782, RFC 3551, RFC 2474, RFC 5246
Codecs	ITU-T G.711 μ -law ITU-T G.711 A-law ITU-T G.729 GSM Adaptive Multi-Rate (AMR) GSM Enhanced Full-Rate (EFR) GSM Adaptive Multi-Rate Wideband (AMR-WB) Opus
Features	Inbound/Outbound Registration Authentication NAT transversal Options method SDP parsing Subscribe/notify messages Customized SIP headers Configurable SIP timers Redirect responses

GENERAL PURPOSE INTERFACES

Ethernet	1 x 10/100/1000 Base T
USB	4 x USB 2.0, 2 x USB 3.0
Video	VGA, DVI
Audio	Standard PC audio

CAPABILITIES

Test control Script APIs	Python scripts Call processor, UT monitor & control, BGAN network emulator, POLQA
Audio paths Voice path continuity check Voice quality evaluation	Analog, file Via tones or POLQA MOS POLQA

MECHANICAL/ENVIRONMENTAL

Form factor	19" / 2U rack mount
Size	L 51 cm x W 43 cm x H 9 cm L 20 in x W 17 in x H 3.5 in
Weight	≈ 11 kg (24 lb)
Power connector	IEC 320 male
Voltage	100-240 VAC, 50/60 Hz
Current (typical)	≈ 0.6 A rms at 115 VAC
Operating temperature	10°C to 35°C
Operating humidity	20% to 90% relative humidity, non- condensing
Regulatory	FCC, CE and RoHS compliant Safety: EN60950-1 Emissions: EN55022 Class A Immunity: EN55024

ORDERING

VTP-01	SB-Safety Voice Test Platform - 2-channel VoIP or analog FXO with two 2-4 wire converters
VTP-02	Multi-Voice Voice Test Platform - 8-channel VoIP or analog FXO
VTP-03	Multi-Voice Voice Test Platform, SIP-only - 8-channel VoIP
VTP-04	Multi-Voice SB-Safety Voice Test Platform - 8-channel VoIP or analog FXO with two 2-4 wire converters
VTP-POLQA	Additional POLQA licence for VTP

CONTACT US

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