SR97/SR97SX 16/18 BIT SEISMIC UNIT

The SR97 is a low cost compact and rugged 16 bit digitizer. It allow to record seismic signal from sources giving +/-10V, or +/-5V. The unit is intended to be used for digitizing old analogic seismic radio-telemetered networks. Good noise results can be achieved using it with its preamplifier and antialias filter.

Overview

This unit is a compact and rugged seismometer/digitizer capable of recording seismic signals with professional perfomance. The low cost allow the usage of this unit also for training and personal use. It requires a Personal Computer for the recording of the seismic signal. The unit can be ordered to operates with 12Vdc or 110-220Vac 50Hz power; with out without preamplifiers. For 3 channels unit sensors can be embedded inside the box.

Technical features

Number of channels w/out pa:	from 8 to 32
Number of sensors:	max 3 sensors 4.5Hz geophone.
High-pass filter:	0.5Hz typical (customizable upon request)
A/D Converter:	SADC19 board
A/D Resolution:	16
A/D Noise:	16 bit
Dynamic range:	96dB
A/D Skew time:	< 125uS (virtually zero)
SAMPLING RATE:	programmable from 1 to 200 SPS per channel
Communication:	38400, N,8,1
Communication protocol:	Binary, proprietary of SARA snc
Clock precision:	< 3 seconds per week at 20°C
Interface:	RS232 (RS422 optional, multiple units addressable)

Amplifier specifcations (if appliable)

Anti-alias filter:	Bessel 5 poles
Cutoff corner frequency:	10Hz typical (customizable upon request) Notice: Customization of filter response is usually free of charge on new devices. Ask for your needs.Amplifier
Noise:	< 0.2microV @ gain of 10000x
Power consumption:	14W with 220Vac or 5W with 14Vdc
Timing syncronization:	with GPS receiver

Applications

- Short range seismic monitoring
- Training
- Personal Seismograph
- Arrays
- Building arrays (with optional wall mounting arrangement)

SARA di Mariotti Gabriele & C s.n.c - 06129 – Perugia – Via A.Mercuri, 4 – ITALY
Tel. +39 075 5051014 Fax +39 075 5006315 www.sara.pg.it info@sara.pg.it