VIS
VOLTAGE INTEGRATED SOURCE

- Broad range of output voltage and allowable loads
- High stability and low harmonic distortion
- Multilevel protection system
- Harmonics generation capability up to the 50th

INTRODUCTION

The VIS voltage integrated source was designed to be used as a stable alternating voltage source for electricity meter test equipment, and in laboratories. The output voltage is isolated and independent of mains voltage. VIS is available in a variety of configurations depending on the values of output power and output voltage.

OPERATIONAL HIGHLIGHTS

The power stage of the source utilizes Power Width Modulation (PWM) technology, which ensures high efficiency and results in very small thermal losses. The stage is driven by an on-board Digital Signal Generator (DSP). The control signal can composed of harmonics with independently defined amplitudes and phases. The internal feedback loop utilizes DSP technology, while advanced algorithms ensure the high stability of amplitude and phase angle, as well as low distortion of the output voltage over a full range of allowable loads of various attributes.

A multilevel protection system protects the source from overload, short circuit, overheating and makes device operation reliable and safe.

The VIS is equipped with an isolated serial interface and can be operated from a PC or other controlling device (host). A variety of sources can be synchronized and operated together to form a poly-phase system. The communication protocol is able to control output settings as well as to access all internal registers.

The VIS voltage integrated source is housed in a 19 inch plug-in case.

HARMONICS ABILITY

Standard version of the VIS voltage integrated source is able to generate harmonics up to the 21st order. The enhanced harmonics version of the VIS source, marked with H, can generate harmonics up to the 50th.

TECHNICAL DATA

VIS model		VIS-400 VIS-400H	VIS-1200 VIS-1200H	VIS-2600
Output power for linear loads		400VA	1200VA	2600VA
Technology of the power stage		PWM with digital feedback loop		
Output voltage range (Phase-Neutral)		30 … 350V (1)		
Output voltage stability		≤ 0.005% (time base: 150 s)		
Total Harmonic Distortion (THD_U)		< 0.1%		
Output power stage efficiency		> 85%		
Frequency of the fundamental component		40 … 70Hz		
Phase angle		0° … 360°		
Harmonics	Standard version	up to the 21st , user programmable		
	H version	up to the 50th , user programmable (2)		
Communication		Isolated RS-422/RS-232		

(1) Other values are available upon request.
(2) Fulfills Chinese standard JJG 597-2005.
For additional technical details, please contact our sales department (sales@metertest.eu)

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