



Radar Signal Processing Unit RSP 347

The RSP 347 is a complete hardware and software solution for acquiring and processing analog or digital radar video from radar units. It provides tools for radar video capturing and broadcasting, plot extraction and target tracking as well as radar control. Due to the modular design it can be easily integrated to existing installations and interfaced to a wide variety of radar equipment.

The RSP 347 can be connected to a PC-compatible server, running the RSP application software, via USB 2.0 port.

It can be optionally equipped with an embedded PC-server hardware which is sufficient to capture analog or digital radar video and broadcast the digital video without target tracking.

The unit is shipped with RSP application software (see separate datasheet for details).

Connection cables for different analog radar units can be ordered as needed.

All the parameters of the RSP 347 can be viewed and configured by a graphical user interface, using a provided service display application.

Radar interface

Analog radar interface card	12-bit 64 MHz A/D converter
Input signals	<ul style="list-style-type: none"> • video (simple or composite) • trigger • ACP/ARP
Input connectors	<ul style="list-style-type: none"> • 2 x BNC (video, trigger) • 1 x DB9M (video, trigger, ACP/ARP)
A/D conversion of radar video signal	<ul style="list-style-type: none"> • Sampling frequency 250 kHz to 64 MHz (range resolution 600 m to 2.34 m) • 12 bits per sample • Up to 65536 radial samples per return • Up to 32768 returns per scan (resolution up to 360°/32768)
Analog radar video	Consilium, Furuno, Kelvin-Hughes, Raytheon, Terma, etc.
Digital radar video	ASTERIX Category 240 uncompressed, Terma, Navico
Remote control	RS-422, RS-232, TCP/IP

Hardware

Dimensions (HxWxL)	44 x 426 x 222
Weight	~3.2 kg (USB version); ~3.8 kg (embedded version)
Form factor	1U 19" rack mountable chassis
Supply voltage	88...264V AC

Embedded server hardware (optional)

Processor	Intel Core i5 family
Memory	2 x 4 GB DDR3L SO-DIMM
Hard disk	M.2 120 GB SSD (system disk); an additional 2.5" SATA disk can be installed for local recordings
Integrated graphics	Intel HD Graphics 5500
Video output	2 x Mini DisplayPort
LAN	1 x 1000 Mb/s
USB	4 x USB 3.0 + 2 x USB 2.0 (internal)
Serial port	1 x RS232 or 1 x RS422
Operating system	CentOS 6

Application software

(See separate datasheet for application software details)

Application software modules	<ul style="list-style-type: none"> • RSP – signal processor • TRACK – target tracker • PPI – plan position indicator – service display application
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