

Specifications

General:

Product Name	nRSP-ST
Product Dimensions	200mm x 105mm x 40mm
Weight	800g
Frequency Coverage	1kHz to 2GHz Continuous coverage
Ambient Temperature	25°C
Useable Temperature Range	-10°C to +60°C
Environmental	Indoor Use

Power:

Typical Current Consumption	
USB Connection	490mA
Ethernet Connection	600mA
WiFi Connection	500mA
Power Supply Requirements	
Input Voltage Range	90V AC to 264V AC
Input Frequency Range	47Hz to 63Hz
Output Voltage Rating	+5.1V DC
Output Current Max	3A Max
Output Power Max	15.3W
Supplied Power Supply	Multicomp MP001636
Power Supply Connector	USB C

Note: PoE (Power over Ethernet) is not provided. An external device would be needed (e.g. a low noise, "Type C Port PoE Splitter Gigabit 5V/2.4A, PoE to USB-C 5V/2.4A Output, 1000Mbps Gigabit Ethernet Compliant")

Antenna connections:

Antenna A Frequency Coverage	1kHz to 2GHz Continuous coverage
Antenna A Impedance/ Connector	50Ω SMA
Antenna B Frequency Coverage	1kHz to 2GHz Continuous coverage
Antenna B Impedance/ Connector	50Ω SMA
Antenna B Bias-T specification	4.7V, 100mA maximum current
Antenna C Frequency Coverage	1kHz to 200MHz Continuous coverage
Antenna C Impedance/ Connector	50Ω BNC
Unselected port isolation	40dB

Specifications

Receiver:

Maximum Input Power continuous	0dBm		
Maximum Input Power burst	+10dBm		
Noise Figure	19dB @ 300kHz	18dB @ 2MHz	17dB @ 12MHz
	15dB @ 25MHz	15dB @ 40MHz	2.6dB @ 100MHz
	2.1dB @ 200MHz	6.0dB @ 340MHz	3.1dB @ 660MHz
	4.4dB @ 1500MHz	5.0dB @ 1800MHz	
Band Filtering	500kHz (low pass)	2MHz (low pass)	
	2-12MHz	2-30MHz	30-60MHz
	60-120MHz	120-250MHz	250-300MHz
	300-380MHz	380-420MHz	420-1000MHz
	1GHz (high pass)		
Notch Filters	Selectable MW, FM and DAB Notch Filters		
ADC Characteristics	14-bit native ADC (2 – 6.048 MSPS)		
	12-bit (6.048 - 8.064 MSPS)		
	10-bit (8.064 - 9.216 MSPS)		
	8-bit (> 9.216 MSPS)		

Compute Engine:

Processor	64bit Quad Core SoC 1.5GHz
Memory	2GB LPDDR4-3200 SDRAM
	8GB eMMC Storage
Modular Compliance	https://pip.raspberrypi.com/categories/635-compliance

Connectivity:

Direct connection	USB 2.0 compliant USB interface
Ethernet connection	Gigabit Ethernet IEEE 1588-2008 compliant
	Detection and correction of swapped ports
	MDI crossover, pair skew + pair polarity correction
WiFi	2.4GHz and 5.0GHz IEEE 802.11b/g/n/ac wireless
Connectivity compliance	Modular compliance certified
	https://pip.raspberrypi.com/categories/635-compliance

Connectivity Modes:

USB	High Bandwidth 10MHz connection
Ethernet and Wi-Fi	Full IQ Mode Remote access for high bandwidth networks. Full functionality as in USB Mode
	IQ Lite Mode Remote access for lower bandwidth networks For applications requiring <192kHz demodulated signal, while still giving up to 10MHz spectrum visibility
	Compact (Audio + spectrum) Mode Remote access for low bandwidth networks enables full demodulation of AM/FM/CW/SSB audio, while still giving up to 10MHz spectrum visibility