DS-HES-P

Portable Radio Altimeter Simulator

Abstract

DS-HES series radio altimeter simulators are photoelectric delay systems which specially developed for various of radio altimeter simulators' productions, measurements and maintains. The systems depend on the technology of fiber-optic delay line, using fiber-optic lines as the carrier, and the feature of light delay to simulate RF microwave signals' space transmission distance. In addition to ,with these technology,the systems can simulate and measure different heights' transmission.

Compare with traditional SAM(surface acoustic wave) delay line system,DS-HES series products have more advantages such as: wide working frequency band, high straight suppression ratio, triple transit signals that are immeasurable, long-life operation without calibration,and high work reliability.

Features

※Wide simulated height range(0 to 22000 above);

※ High simulate altimeter accuracy(⩾1‰)

※Optional simulate configuration(support more than 2^{10} configurations)

※Manual switch and automatic switch ;

※Volume miniaturization, strong electromagnetic compatibility, high work reliability;

※Multiple control mode:UART, LAN,etc.

※Various standard tests platform interface such as PXI, VXI, LXI.

Application

Place:Radio altimeter for radar,AEW,satellite,helicopter and etc

※Measure the accurancy of altimeter

※Measure the secsiticity of research and tracking

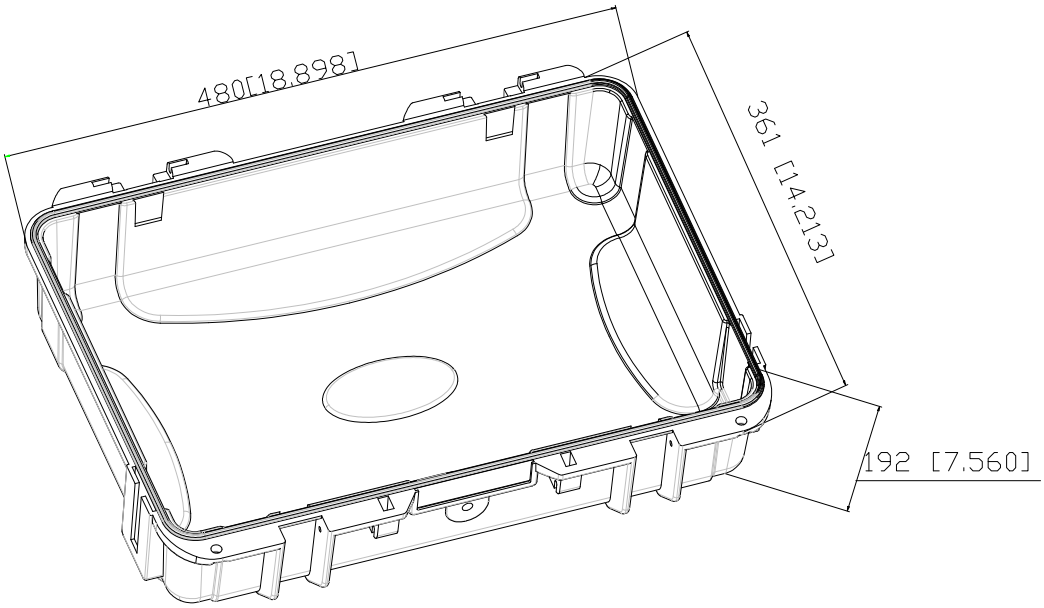
※Measurement of other parameters

Electrical/Optical Characteristics

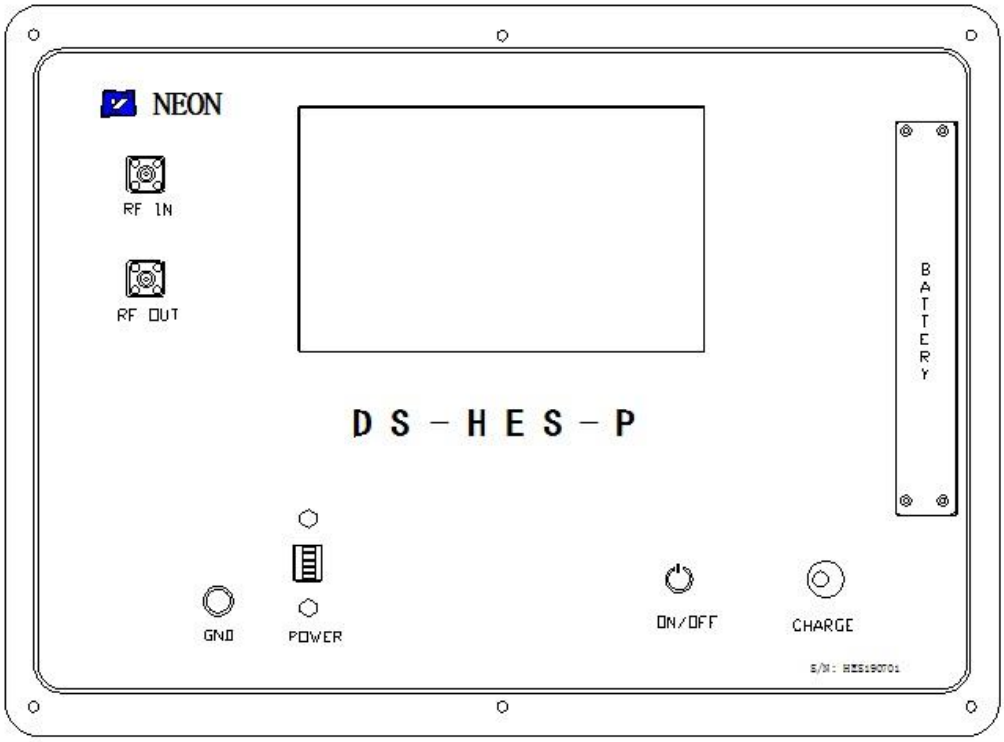
Parameter	Parameter values			Unit	Remark
	Min	Typical	Max		
Frequency range	4	-	4.6	GHz	
Amplitude response	-	±1.5	±2	dB	
Simulate height	1	-	22000	m	Extensible
Simulate height's accuracy	0.5%	1%	-	-	
Maximum input power	-	2	Customized	W	Continuous wave
	-	100	Customized	W	Pulse wave
Input VSWR	-	1.3	1.5	-	
Output VSWR	-	1.3	1.5	-	
Impedance	-	50	-	Ω	
Simulate attenuation's adjustable range	-	80	Customized	dB	
straight suppression ratio	60	80	-	dBc	
triple transit signals	No				
Operating Temperature Range	-40	-	+70	℃	Customized with quality grade
Storage Temperature Rang	-55	-	+85	℃	
Simulate height vs. Temperature	-	-	7	ppm/℃	
Simulate accuracy vs. Temperature	-	3	6	%/℃	Can be compensated

The packages and the pins (Unit: mm[inch])

◆ Chassis size



◆ Panel



RF connector：SMA-K（Customized）
DC connector：DE-9PS（Customized）