

## ASLE-140-36D

### Description

Polaris' ASLE series is an advanced satellite link emulator designed to extend the propagation time delay of the PSLE series from 265 ms to 530 ms. The ASLE IF-band series operates at 70 MHz or 140 MHz and supports Doppler shift of up to -3 MHz to 3 MHz.



The ASLE-140-36D provides accurate reproductions of propagation time delay, path loss, and doppler frequency shift for closed-loop testing of geostationary satellites and earth station terminals. The ASLE-140-36D operates at 140 MHz and provides operating bandwidth of 36 MHz.

### Features

- Operating frequency: 140 MHz
- Operating bandwidth: 36 MHz
- Time delay range: 0 to 530 ms (1  $\mu$ s steps)
- Doppler shift range: -3 MHz to 3 MHz (1 Hz steps)
- Noise Floor: < -125 dBc/Hz
- Remote interfaces: USB, RS-232, or RS-422/485

### Applications

- Satellite Modem Test
- VSAT Test
- Satellite Payload Test
- UAV Test
- Earth Terminal Test
- Satellite System Integration Test Beds
- Mobile Transceiver Test

## Specifications

Parameters		Specifications	Remarks
Operating Frequency		140	
RF Input Power (dBm)		$\leq -10$	
Maximun Gain (dB)		$0 \pm 1$ at 0dB attenuation & 140MHz	
Operating Bandwidth (MHz)		$\geq 36$	
Gain Flatness (dBp-p)		$\leq 1.5$	
Time Delay	Range (ms)	0 (Bypass), 0.01 to 530	
	Step (us)	1	
	Accuracy (us)	$\leq \pm 0.1$	
Attenuation	Range (dB)	0 to -40	
	Step (dB)	0.5	
	Accuracy (dB)	$\leq \pm 0.5$	
Doppler Shift	Range (MHz)	-3 to 3	
	Step (Hz)	1	
	Accuracy (Hz)	Based on 10MHz reference	
Spurious (dBc)		$\leq -45$ at in-band ( $\leq -50$ dBc typical)	
Noise Floor (dBc/Hz)		$\leq -125$	
V.S.W.R. ( : 1)		$\leq 1.5$ at 50 $\Omega$	
Control and Interface	Local	Front Panel (VFD & Keypad)	
	Remote	USB, RS-232, or RS-422/485	
Primary Power	Voltage (Vac)	90 to 240	
	Frequency (Hz)	47 to 63	
Operating Temperature (°C)		+10 to +40	
Size (Width x Height x Depth) (inch)		19" x 5.25" x 21"	
External Reference Switching		Automatic (Switching Time: 5 sec)	10MHz, $0 \pm 2$ dBm, 50 $\Omega$

※ ASLE(Advanced Satellite Link Emulator), 140(140MHz), 36D(36MHz Bandwidth, Doppler)

- Address: #1913, Anam tower, 311 Teheran-ro, Gangnam-gu, Seoul, Republic of Korea
- Tel: +82-2-2009-2120
- e-mail: info@polariswave.com
- web: www.polariswave.com