

# SILVERNET

## ECHO Mobility Systems



### Mobile Wireless Solution

ECHO Base Station & ECHO M5 Vehicle-Mountable,  
Wireless Roaming Data Station

**SILVERNET**

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Version 1.1

# Product Overview

The ECHO M5 is a specially designed vehicle-mountable wireless client/station, featuring enhanced technology for mobile data applications. SilverNets zero sense roaming algorithms enable the ECHO M5 to connect to the the ECHO BS seamlessly for mobile data transmission, whilst keeping zero packet loss and smooth roaming across the system.

Ideal applications for this solution include transportation, warehousing, mining and surveillance.

## Features

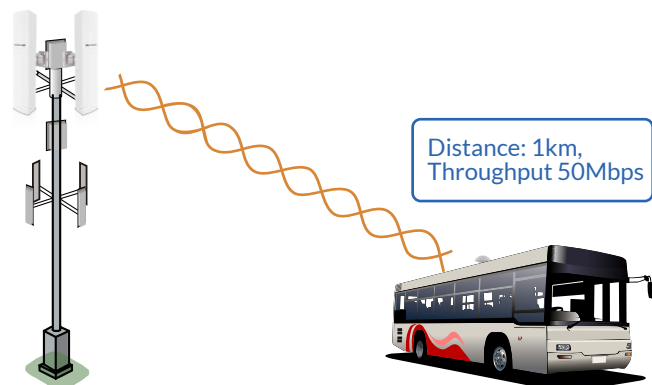
### Waterproof

- Magnetic base mounting system
- Ruggedised anti-wobble design



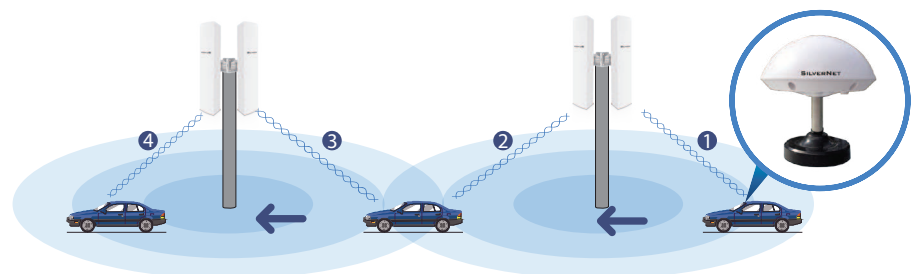
### Powerful & Sensitive

- Omni 7dBi High gain antenna
- Up to 27dBm tx power
- Up to -98dBm rx sensitivity
- TDMA compatible works well with ECHO BS Base station



### Zero Sense Roaming

- Zero packet loss while roaming
- Ideal for mobility video streaming



# Features and Benefits



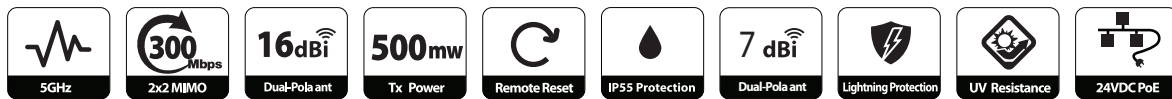
## SIL-ECHO-BS Multi-Point Base Station

- Compliant with 5GHz 802.11n/a, speed up to 300Mbps
- TDMA greatly Improves the network scalability in throughput and latency
- 16dBi dual-polarised 120° sector antenna to expand wireless coverage
- Optimised output transmission power & receive sensitivity.
- Easy deployment and adjustment with the provided mounting kits
- Passive PoE(24vdc)
- Outdoor weather-proof housing
- Lightning protection as standard

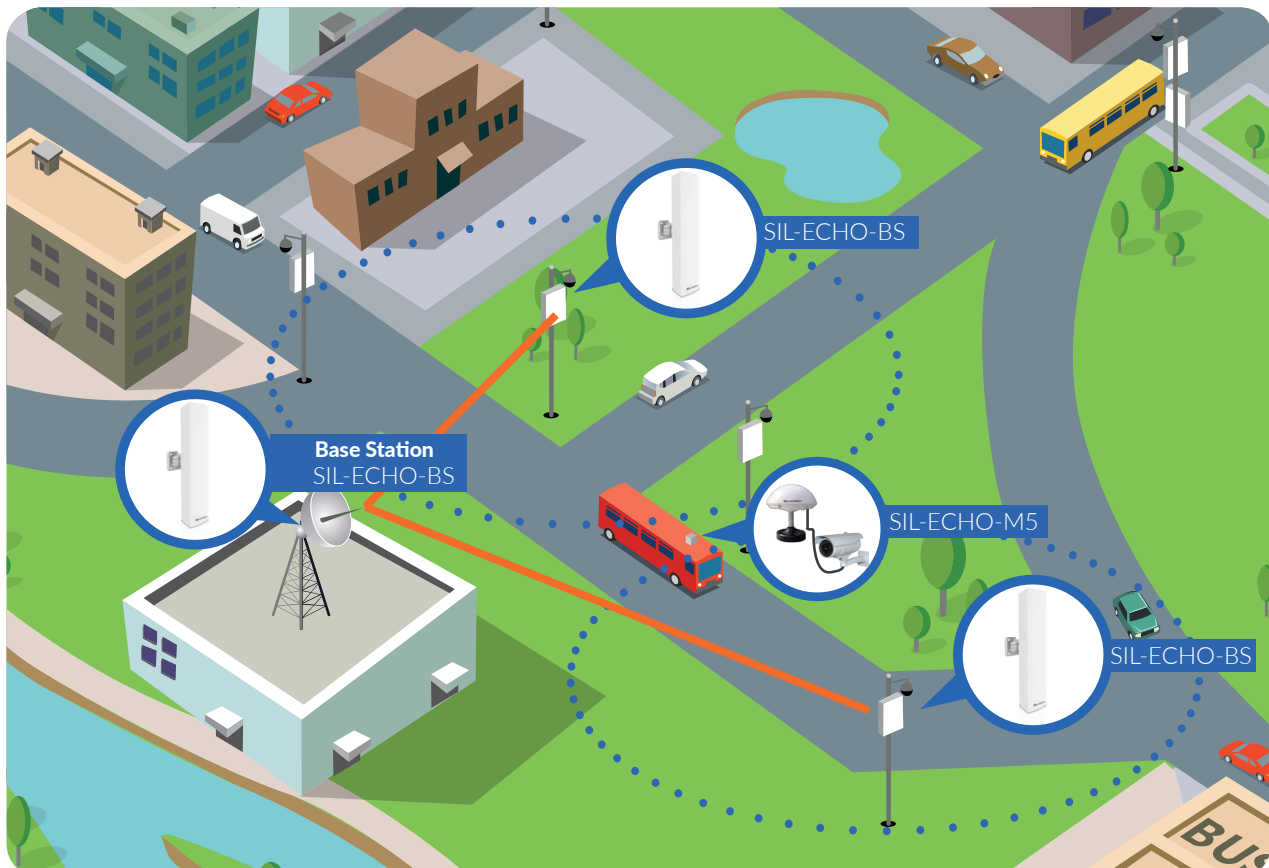


## SIL-ECHO-M5 Roaming Data Station

- Compliant with 802.11n/a, speed up to 300Mbps
- Zero sense roaming to ensure smooth handover between multiple Base Stations
- Advanced parameter settings for different types of roaming environments
- 7dBi dual-polarised 360° omni antenna
- Optimised output transmission power & receive sensitivity.
- Easy deployment Magnabase mounting for vehicles
- Passive PoE (24vdc)
- Outdoor weather-proof housing
- Lightning protection as standard



## Typical Network Diagram



SIL-ECHO-BS as a Base Station in PtMP & SIL-ECHO-M5 fitted to mobile vehicles

# Specifications



Radio	SIL-ECHO-BS	SIL-ECHO-M5
Standards	802.11a/n	802.11a/n
Frequency	5GHz	5GHz
5GHz speed	300Mbps	300Mbps
5Ghz MIMO	2*2	2*2
Tx Power	27dBm	27dBm
Rx Sensitivity	-74dBm@300Mbps -78dBm@54Mbps -98dBm@1Mbps	-74dBm@300Mbps -78dBm@54Mbps -98dBm@1Mbps
<b>Antenna</b>		
Antenna Gain	16dBi	7dBi
Beamwidth	H: 120°, V: 8°	H: 360°, V: 8°
<b>Physical Parameters</b>		
Dimensions	395 x 100 x 90mm	178 diameter x 157mm
Weight	0.77kg	1.23kg
Enclosure	Weatherproof Plastic	Weatherproof Plastic
ESD Protection	16kV	16kV
Lightning Protection	8kV, GND Terminal	2kV
Working Temp	-40 to 70°C	-40 to 70°C
Storage Temp	-40 to 85°C	-40 to 85°C
Working Humidity	10% to 95% non-condensing	10% to 95% non-condensing
<b>Power</b>		
PoE	24VDC	24VDC
Consumption	6W	6W
<b>Security</b>		
Firewall	Yes	Yes
Encryption	WPA/WPA2-PSK (AES/TKIP)	WPA/WPA2-PSK (AES/TKIP)
<b>Interfaces</b>		
LAN Ports	10/100/1000 BASE-T (RJ45)	10/100/1000 BASE-T (RJ45)
<b>LED</b>		
LED Lights	Power, LAN, WLAN and RSSI	Power, LAN, WLAN and RSSI
<b>Warranty - 1 year</b>		
Extendable to 2 Year	Yes	Yes
<b>Pack Contents</b>		
	Radio PoE PSU Mounting Bracket Steel Strap	Radio PoE PSU Magnabase Mounting Kit

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