



Small, light & dependable™

**safemobile**

# AIRRAPTOR™ LITE

## Miniature P25 Suitcase Repeater

12 HOUR OPERATION  
MERLAN P25 CONNECTIVITY  
ULTRA-LIGHT & SMALL  
MISSION CRITICAL DURABILITY  
P25 CODE TRANSPARENT



from



**WIRELESS PACIFIC™**  
...WHEN IT MATTERS





# Small, Light and Dependable

Responding to emergencies and natural disasters demands ultra reliable equipment that can be deployed at a moments notice. Radio users have long sort the ideal tactical response portable repeater configuration especially those operating in P25 digital mode. A dependable communications solution which could be deployed by non-technical staff simply and easily in any environment. Prior attempts had either been physically too heavy and cumbersome, or had required external connection of large bulky batteries and invariably always needed technical support. Wireless Pacific's unique know how in digital radio and rapid deployment techniques has now created Pico P25™ - the world's smallest and lightest self contained, P25 secure suitcase repeater.



## Rapid Deployment Miniature P25 Suitcase Repeater

Introducing AIRaptor Lite, the world's smallest and lightest P25 digital suitcase repeater. Designed to be deployed in every environment, by almost anyone in just minutes. They are fully code transparent with an internal 8.5AH sophisticated battery management system providing for over 12 hours of heavy voice traffic communications.

AIRaptor Lite's ultralight (<10lbs), ergonomic weatherproof design means it can be deployed in harsh environments with little or no protection. Most significantly, it has been optimized so that "talk in" and "talk out" range is optimally balanced for P25 portable hand-held radios. This helps insure personnel won't be falsely "lured out" of radio range due to over-powered base station transmissions. With the MERLAN P25 option, the AIRaptor Lite units can be hooked together, or linked to existing fixed repeaters, RF control and local base stations to provide dynamic wide area networks. This also allows you to tap into other agency networks for joint operations - anywhere in the world. Designed specifically for mission critical professionals, make it part of your tactical response inventory today.

..when it must work!



- VHF/UHF REPEATER
- V/U & 800MHz RF CONTROL
- CROSS BAND OPTION
- AES/DES TRANSPARENT
- MERLAN P25 "GLOBAL" OPTION
- INTEGRATED 8.5AH Li-POL BATTERY
- SMART DEPLOYMENT ACCESSORIES
- SIMPLE INTUITIVE OPERATION
- MINIMAL USER TRAINING



Magnetic base antenna kit



Solar kit



Temporary mast kit

Pump-up mast kit





## creating a safer place to work

### Encryption

The miniature AIRaptor Lite allows secure operation via transparent operation whereby any valid P25 voice transmission is passed through the repeater.

### Solar Power

AIRaptor Lite is designed to allow use with a broad range of solar panels from leading suppliers or the WPSPK series. In normal sunlight this allows the AIRaptor Lite to be re-charged and left for weeks, even years without the need for human intervention.

### MERLAN P25™ Dynamic Wide Area Connectivity

Setting up a AIRaptor Lite with MERLAN P25 couldn't be simpler. After you've found a suitable location to locate the radio repeater, just connect a cat 5 cable to any available ethernet wall socket. Just enter the local IP address into the MERLAN P25 server and you're connected. Need wireless? Use the WiFi option and log into any 802.11 access point on your network or even at an internet cafe. Connect as many other AIRaptor Lite units as you need, knowing all transmissions received will be instantly routed to every other site for re-transmission - 100% secure.

### Remote Site

A comprehensive range of temporary mast kits provides all the necessary parts to implement a highly substantial remote antenna site. These kits are highly compact and designed for immediate deployment with minimal effort. The WPEMF kits include ultra-light fiberglass masts-both 5 and 10 Metres versions. Each kit includes a black collapsible mast, unity gain antenna, guy ropes, anchors, mounting base and all required installation items. Alternatively for more durable deployments, we offer a range of WPEMA pump-up aluminium masts.

### Transit case

A fully IP67 rated transit case is available for transport and shipping the Raptor Lite repeater anywhere in the world on any aircraft. These cases integrate a custom mould for protecting and storing the repeater and its supplied AC power cable. The case also includes a magnetic base antenna with 5M of coax, along with a 2M DC charging cable with battery "alligator" clips and a deployment operating guide inside its top lid.

### Secondary Battery

The PPP3600 lightweight Li-POL Power Pack is available when extended operation is required. These 34AH packs can extend standalone life of the Raptor Lite in repeat mode to over 7 days at a typical 20% Tx duty cycle. These matching size suitcases are shock resistant and completely water/air tight and are available in the complete range of Pelican® colours. Note: can also be used with WPEMA mast pumps.

## MODEL OVERVIEW

FREQUENCY BANDS	CONFIGURATIONS	CHARACTERISTICS	PERFORMANCE
136-174MHz 360-400MHz 400-480MHz 450-520MHz	REPEATER CROSS BAND RF CONTROL BASE STATION COMMAND POST	WEATHERPROOF ULTRALIGHT: <10lbs MINIATURE: 10.6 x 9.8 x 5.1"	12HRS @10% RPT 8.5AH BATTERY 10-30VDC INPUT 90-260VAC INPUT 6 MODE - 5 WATT



Control Panel



IP67 AC/DC Connector  
(MERLAN P25 OPTION FITTED)



Transit Case



PPP3600 34AH LI-POL  
Power Pack





## Specifications:

Frequency bands:	136-174, 360-400, 400-480, 450--520 MHz
Channel Spacing:	12.5/25/30kHz
Operating Temp.:	-10°C to +60°C ( RF -30°C to +60°C)
Frequency Stability:	2ppm
Tx Current:	2800mA @5W
Stand-by Current:	380mA
Input AC Voltage:	90-260VAC 47-63Hz
Input DC Voltage:	10-30VDC >25W
RF Power Output:	1 -5W (programmable)
Duty Cycle:	5 WATTS Continuous
Duplexer Bandwidth:	500kHz max (Max Tx:Tx/Rx:Rx)
Duplexer Loss:	1.5dB max loss (1dB typical)
FM Hum & Noise:	>40dB(12.5kHz) / >45dB (25kHz)
Spurious Emissions:	<0.25µW <1GHz
Sensitivity:	0.3uV for 12dB SINAD
P25 Sens. (5% BER):	-116dBm
Intermodulation:	>65dB (ETS Method)
Selectivity:	25kHz >73dB / 12.5kHz > 65dB
Spurious Responses:	70dB (ETS)
Dimensions:	27.0 x 24.6 x 12.4 cm
Battery Life:	>12 hrs @ 10% 5W Tx duty cycle
Capacity (ambient 68F/20C)	8.5AH Li-Ion
Standard Weight:	<4.5Kg
Type Acceptance:	FCC, ETS300 AS/NZ4295



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