



# Logic Portable Repeater

SIMPLE AND INSTANTLY DEPLOYABLE TWO-WAY RADIO COVERAGE



### LOGIC PORTABLE REPEATER

The Logic Portable Repeater (LPR) is designed to allow simple and instantly deployable wide area two-way radio coverage. Housed in a rugged, waterproof Pelican case, it uses the proven and innovative Radio Activity Kairos repeater at its heart. The Kairos repeater is a highly flexible but compact 25w repeater platform that allows the Logic Portable Repeater to be one of the smallest deployable repeater packages available.

The Kairos repeater is available for all common frequency bands and can operate in multiple modes including analogue, DMR Tier 2 and P25 conventional – all in a single repeater. The Kairos repeater also has one of the lowest power consumptions currently available, allowing outstanding shift life from the integrated 22 AHr Lithium Ferro Phosphate (LiFePO4) battery.

The LPR can be supplied with or without an internal battery, providing fantastic flexibility for different power supply arrangements – power supply and battery management is built in to the package, simplifying its use, even for non-technical personnel.

The package also houses an internal duplexer enabling use of a single antenna, different manufacturer options can be accommodated or supplied by Logic Wireless.

The mechanical design has been engineered for exceptional durability, giving confidence for rapid deployment in harsh environments. Simplicity and toughness have been the key design factors for Logic Wireless to develop the most capable portable repeater on the market.



# **PRODUCT HIGHLIGHTS**

#### **SLED DESIGN**

The innovative sled design comprises of an internal component tray housing the repeater and duplexer. The sled can be removed from the outer housing quickly to allow easy retuning of the duplexer when rechannelling the portable repeater.



#### **PACKAGE SPECIFICATION**

Case	Pelican 1430 Orange – alternate colour options: Black, Yellow, Olive Drab, Desert Tan		
	Desert fair		
Dimensions	420 x 220 x 340mm		
Runtime	>10Hrs @ 15W Transmit, 50/50 Duty Cycle		
Battery	22 AHr Lithium Ferro Phosphate LiFePO4*		
	No battery option is available		
Charger	Input – 100-240VAC, Output – 15VDC 6A		
Charge Time	<6Hrs		
Aux DC Input	12-16VDC		
	Internal battery voltage indicator		
	Battery isolation switch		
IP	IP – Minimum IP54 with the lid closed		
Package Weight	13.4kg		

<sup>\*</sup> Please check your local battery shipping restrictions





# TECHNICAL SPECIFICATIONS

#### **CHOICES OF DUPLEXER**

(OTHERS AVAILABLE ON REQUEST):

BAND	MIN TX – RX SPACING	MANUFACTURER	MODEL
66-88MHz	800kHz	Procom	DPF 4/6-HX-150
136-174MHz	1.3MHz	Procom	DPF 2/6-HX-150
406-470MHz	5-7MHz	Procom	DPF 70/6-5/7-N(f)
406-470MHz	9-13MHz	Procom	DPF 70/6-9/13-N(f)
440-490MHz	4.6-6MHz	EMR Corp	65316-1/MC(5G)
440-490MHz	8-11MHz	EMR Corp	65316-1/MC(10G)
490-520MHz	4.6-6MHz	EMR Corp	65316-0/MC(5K)

#### KAIROS REPEATER SPECIFICATIONS

Frequency Bands	66-88MHz		
	136-174MHz		
	400-470MHz		
	450-520MHz		
Supported Protocols			
Available as standard:	Analogue, DMR Tier II, Voting		
Software upgrade options:	DMR Tier III, P25 Conventional, POCSAG, Simulcast		
Channelisation	25/ 20/ 12.5/ 6.25KHz		
RF Output Power	1-25 W		
	100% duty cycle/ selectable per channel		
Operating Temperature	-30°C to +60°C		
Current Consumption			
Transmit:	4.3A @ 25W RF		
Receive:	360mA with Main + Diversity Receive enabled		
Interfaces	Audio Lines 2 x 4 wire + E&M		
	LAN port Ethernet 10 Base-T/ 100 Tx on an RJ45 socket		
	3x Digital I/O		
	2x Analog Inputs		

