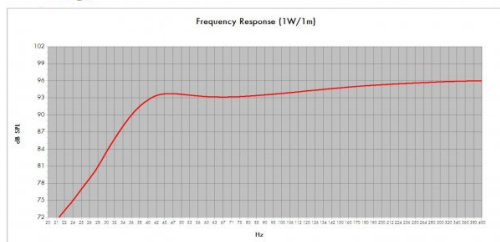
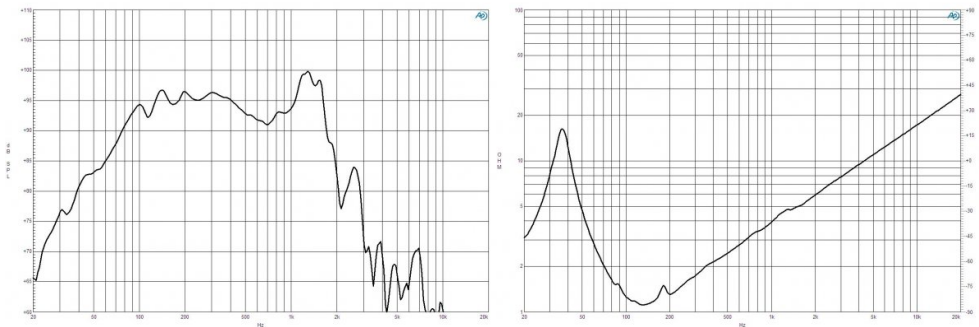




- 5000 W continuous program power capacity
- 153 mm (6 in) split winding aluminium voice coil
- 37 - 1000 Hz response
- 99 dB sensitivity
- Neodymium magnet allows a very high force factor and linear excursion
- Double silicone spider with optimized compliance
- 80 mm peak-to-peak excursion before damage
- Ventilated voice coil gap for reduced power compression

When used with the Powersoft IPAL power amp modules, the 21PAL can provide extreme output in a very small, dependable package. For more information, visit the [Powersoft Website](#).



Model:	21IPAL	Configuration:	One Driver
Enclosure Type:	Mass Ruffin		
Internal Net Volume (liters):	300	GR:	4
Cutting Frequency (Hz):	49	Roll-Off (dB):	482.8
Frequency 1/2 dB (Hz):	42.1	Roll Length (cm):	28.2

## SPECIFICATIONS

Nominal Diameter	530 mm (21 in)
Nominal Impedance	1 Ω
Minimum Impedance	1.1 Ω
Nominal Power Handling	2500 W 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
Continuous Power Handling	5000 W Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
Sensitivity	99 dB Applied RMS Voltage is set to 1 V for 1 ohm Nominal Impedance.
Frequency Range	37 Hz - 1000 Hz
Voice Coil Diameter	153 mm (6 in)
Winding Material	Aluminium
Former Material	Glass Fibre
Winding Depth	48 mm (1.9 in)
Magnetic Gap Depth	18 mm (0.7 in)
Flux Density	1.35 T
Woofer Cone Treatment	TWP Waterproof Both Sides

## PARAMETERS

Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.

Fs	37 Hz
Re	0.7 Ω
Qes	0.22
Qms	4.9
Qts	0.21
Vas	155 dm <sup>3</sup> (5.47 ft <sup>3</sup> )
Sd	1680 cm <sup>2</sup> (260.4 in <sup>2</sup> )
η0	3.2 %
Xmax	22 mm
Xvar	15 mm
Mms	487 g
Bl	19.1 Tm
Le	0.5 mH
EBP	168 Hz

## DESIGN

Surround Shape	Triple Roll
Cone Shape	Radial
Magnet Material	Neodymium Inside Slug
Spider	Double Silicone
Pole Design	T-Pole
Woofer Cone Treatment	TWP Waterproof Both Sides
Recommended Enclosure	200 dm <sup>3</sup> (7.06 ft <sup>3</sup> )
Recommended Tuning	40 Hz

## MOUNTING AND SHIPPING INFO

Overall Diameter	547 mm (21.5 in)
Bolt Circle Diameter	527 mm (20.7 in)
Baffle Cutout Diameter	508 mm (20 in)
Depth	269 mm (10.59 in)
Flange and Gasket Thickness	13 mm (0.51 in)
Air Volume Occupied by Driver	16 dm <sup>3</sup> (0.56 ft <sup>3</sup> )
Net Weight	23 kg (50.71 lb)
Shipping Units	1 pcs
Shipping Weight	25.3 kg (55.78 lb)
Shipping Box	570x570x320 mm (22.44x22.44x12.60 in)

## SERVICE KITS

LF recone-kits	RCK211PAL
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