

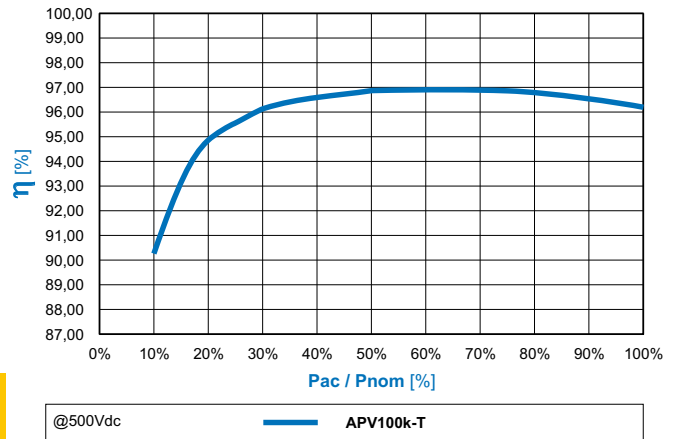
# Sizes APV100k-T • Dimensions and weight - Technical data

RADIUS Industrial • Three-phase inverter



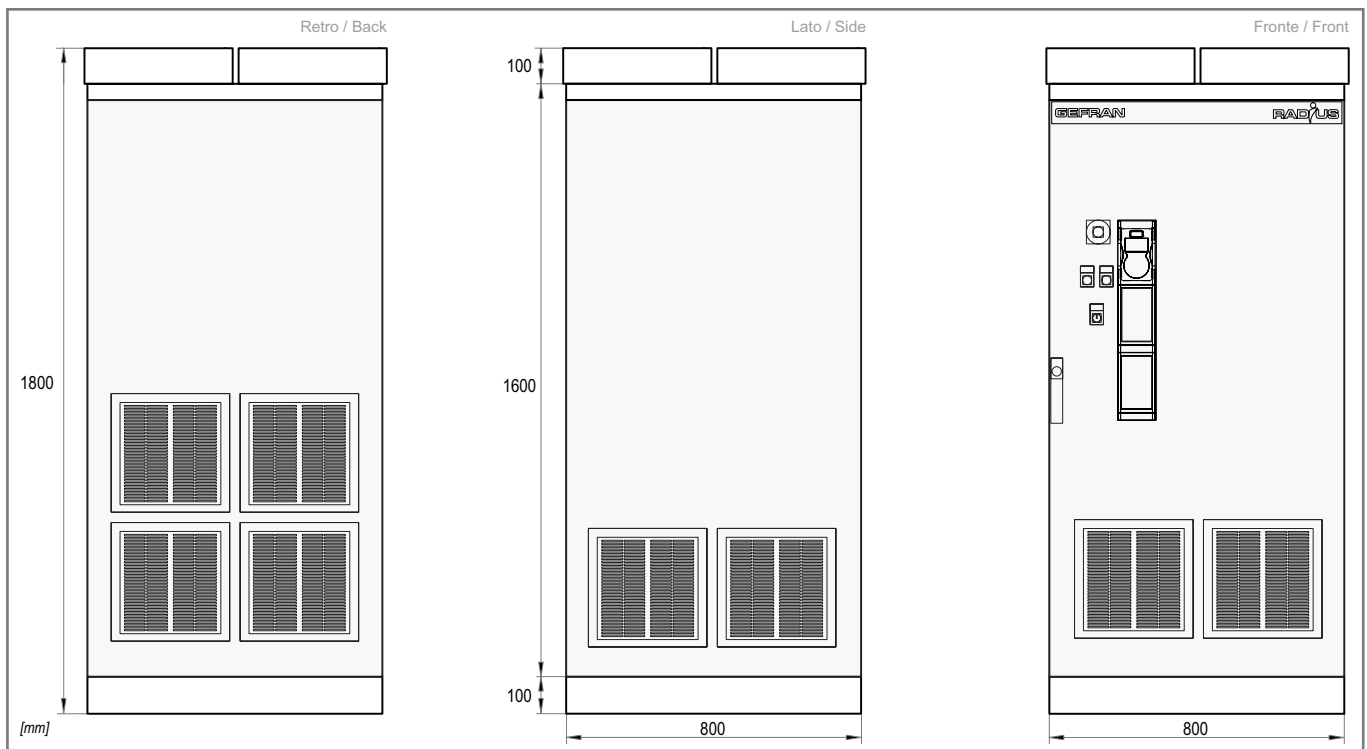
	APV-100k-T (with transformer)	APV-100k-T-E (with transformer)
Rated power (AC side)	90 kW (BT)	100 kW

Efficiency curve



**5 years**  
warranty

## Dimensions and weight



Model	APV100k	
<b>Dimensions:</b> Width x Height x Depth	mm [inches]	800 x 1800 x 800 [31.5 x 70.87 x 31.5]
<b>Weight</b>	kg [lbs]	800 [1763.7]

## Technical data

Central Inverter - Model			APV100k-T <sup>(1)</sup>	APV100k-T-E
<b>DC INPUT</b>				
MPPT voltage range	U <sub>DC</sub>	[V]	465...850	465...850
Minimum operating voltage	U <sub>DC min</sub>	[V]	450	450
Maximum voltage allowed	U <sub>DC max</sub>	[V]	1000 <sup>(2)</sup>	1000 <sup>(2)</sup>
Maximum current allowed	I <sub>DC max</sub>	[A]	197	216
<b>AC OUTPUT</b>				
Rated power		[kW]	90	100
Rated Output voltage	U <sub>AC nom</sub>	[V]	400 (±15%)	400 (±15%)
Maximum current	I <sub>AC max</sub>	[A]	144.3	144.3
Short circuit current (=1.5*I <sub>n</sub> )	I <sub>SC</sub>	[A]	216.5	216.5
Grid frequency	f <sub>AC</sub>	[Hz]	50	50
Harmonic distortion	THD grid	[%]	≤ 3	≤ 3
Power factor at rated power	cosphi		0.99	0.99
Adjustable power factor	cosphi		from -0.9 to +0.9	from -0.9 to +0.9
<b>EFFICIENCY RATING</b>				
Maximum efficiency <sup>(3)</sup>		[%]	96.9	
European efficiency (Euro-ETA) <sup>(3)</sup>		[%]	95.50	
<b>GENERAL DATA</b>				
Protection class			IP30	
Power switch on AC side			yes	
Power switch on DC side			yes	
Reverse polarity protection diodes on DC side			yes	
Ground fault monitoring			optional	
Overcurrent protection	AC side		yes	
	DC side		no	
Overvoltage protection	AC side		no	
	DC side		optional	
Remote plant monitoring			optional	
Ground kit			optional <sup>(2)</sup>	
Ambient temperature range (without power derating)		[°C]	from -10 °C to + 50 °C	
Requested air flow (input)		[m <sup>3</sup> /h]	3000	
Cooling			Thermostatically-controlled	
Relative humidity of air		[%]	from 5% to 85% without condensation	
Maximum altitude		[m]	1000 m (2000 m with derating)	
Topology			With isolation transformer	
Certification			CE; CEI 0-21	CE; VDE V 0126-1-1; RD 1663; G59/1; G59/2; C10/11; AS4777.2; AS 4777.3.

<sup>(1)</sup> Standard product configuration for LV applications (CEI 0-21). For MV applications (A70) please contact the Gefran after-sales service.

<sup>(2)</sup> For string configurations, maximum recommended V<sub>DC</sub> voltage 965V. If using the ground kit, maximum V<sub>DC</sub> = 900V.

<sup>(3)</sup> Efficiency refers to values calculated at 500V<sub>DC</sub> (at 25°C), excluding auxiliary power supply.