

EV FACT SHEET

Hyundai Ioniq 6

Created and written by: Bryce Gaton Contact: Bryce@EVChoice.com.au



Image: Hyundai INTRODUCTION

The Hyundai Ioniq 6 is built in South Korea and classified by VFACTS as a medium passenger vehicle. As a passenger sedan, it is in fact a pleasant departure from the almost ubiquitous SUV style that is the current norm. As the Ioniq 6 is built on parent company Hyundai's BEV-only E-GMP (Electric Global Modular Platform), it shares the drivetrain and battery system with the Hyundai Ioniq 5, Kia EV6 and Genesis GV60. Also, like its E-GMP siblings, the Ioniq 6 offers Vehicle to Load (V2L) functionality at up to 3600W.

The Ioniq 6 can DC charge at up 233 kW, meaning when connected to the fastest DC chargers it can recharge 100 km of range in just over 4.5 minutes. Initially offered with a single 77.4kWh battery choice, a 58kWh option was added to the renamed 'Ioniq 6' base model in late 2023. **Updates:**

November 2023:

- Addition of 53 kWh 'Standard Range' battery
- Change of name for base Techniq version to 'loniq 6'
- Choice of AWD or RWD in Dynamiq and Epiq versions
- Addition of heat pump heating/cooling system
- External V2L adaptor for AC socket now a pay-for option

DRIVING RANGE

Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle. However few manufacturers now give this figure for their new releases. Instead they quote the more achievable ranges found using the newer European WLTP test cycle.

Therefore, to avoid disappointment always check which test cycle has been used when assessing an EV for your needs. As a guide, NEDC is generally 30% too high, WLTP a good estimate if doing mostly urban and outer suburban driving and US EPA the better guide if doing mostly outer suburban to regional driving.

DRIVING RANGE (continued)

Testing system range estimates:						
Variant	NEDC (Aust)	WLTP (Euro)	EPA (USA)			
loniq 6 (58kWh)	Not rated	429	NA ³			
loniq 6 (77kWh)	Not rated	614	581			
Dynamiq (2WD)	Not rated	TBC	TBC			
Dynamiq (AWD)	Not rated	519	434			
Epiq (2WD)	Not rated	TBC	TBC			
Epiq (AWD)	Not rated	519	434			

Table 1: Driving range estimates for the Hyundai Ioniq 6

Using the US EPA range – a two-wheel drive loniq 6 should be capable of a return trip from the Melbourne GPO to Port Fairy on Victoria's south coast, provided the heating or air conditioning were not heavily used. For this sort of trip, a short top-up DC charge at Colac or perhaps the (soon to come) DC chargers at either Port Fairy itself or Warnambool would be recommended. (For further charging options and availability, see: https://www.plugshare.com/).



Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Ioniq 6 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers² as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes:

- 1. <u>https://www.greenvehicleguide.gov.au</u>
- The loniq 6 can be charged at any AC EVSE, however an adaptor will be needed to use the (few) remaining older EVSEs fitted with Type 1 (J1772) plugs.
- 3. Not Available: Standard Range version not sold in the US.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the Ioniq 6 is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 7.4 kW (32A) Three phase: 11 kW (16A per phase)

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to and the chosen battery size. Approximate charging times for the Ioniq 6 are shown in table 2 below.

AC: 0 – 100% time				DC: 0 – 80% time	
10 A (standard power point)	15 A 1 phase (Caravan outlet)	32 A (1 phase Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (350kW)
53kWh: 25h	14h	8h	5h	1h	18m
77.4kWh: 37h	21h	11h	7h	1.6h	18m

Table 2: Approximate charging times for the Hyundai Ioniq 6.

DC fast charging:

The Ioniq 6 uses the CCS2 DC fast-charge connector and can charge at up to 233 kW.

V2X capability:

The Ioniq 6 offers V2L functionality up to 15A (3600W) through a plug-in adaptor for the AC charge socket. **Notes:**

V2X is the generic term covering the options of getting 230V AC power from the battery and supplying it as:

- V2L: vehicle to load (230V power available from outlet in car)
- V2H: vehicle to home (supply home via special connection)
- V2G: vehicle to grid (supply home or grid via spec. connection)

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the loniq 6, an 11kW three phase AC EVSE would be needed. However, depending on your existing power supply and/or charging needs, a lower rated EVSE may only be practicable, or needed. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 1 above.

The Ioniq 6 also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging with this EVSE will take around 25 (53 kWh battery) or 37 hrs (77.4 kWh battery) for a 0 - 100% charge.

Important notes for any EVSE installation:

- 1. High charging rates are generally not needed for overnight charging.
- 2. Homes do not normally have three phase AC connected.
- Switchboard and/or electrical supply upgrades may be needed if your home or business is more than 20 years old. For more information on this item - read EV Information articles at <u>http://evchoice.com.au/</u> or see:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Boot volumes in litres (1 litre = 10 x 10 x 10 cm)

- Seats up: 401 L
- Seats down: not specified

Front boot ('froot'):

- 45 L (2WD)
- 14.5 L (AWD)

Dimensions:

- Overall length: 4855 mm
- Overall width:
 - o 1880 mm (mirrors in)
 - 2073 (mirrors out)
 - Overall height: 1495 mm
- Ground clearance: 141 mm

Battery:

- Standard Range: 53 kWh (TBC usable)
- Extended Range: 77.4 kWh (74 usable)

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 11 kW max.
- DC: 233 kW max.

Charge port location:

• Right-hand rear.

Energy consumption: (WLTP)

- 14.3 kWh/100 km (2WD, 77.4 kWh battery)
- 16.9 kWh/100 km (AWD)

Kerb weight:

- 1968 kg (2WD)
- 2078 kg (AWD)

Drive configuration:

- Rear wheel drive Dynamiq
- All Wheel Drive (AWD) Techniq and Epiq.

Towing:

• 1500 kg braked/750 kg unbraked.

Performance:

	Max. Power	0 to 100 km/h
Variant	(kW)	(Sec)
Ioniq 6 (Std. Range)	111	8.8
Ioniq 6 (Ext. Range)	168	7.4
Dynamiq (AWD)	239	5.1
Epiq (AWD)	239	5.1

IMPORTANT NOTES:

Always check the specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton for errors factual or due to reproduction in this Fact Sheet. Whilst all efforts are made to ensure the accuracy of the material in this Fact Sheet, manufacturers regularly make changes (often unannounced) to their model ranges and specifications.

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