EV FACT SHEET Hyundai loniq 5

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Image: Hyundai

INTRODUCTION

On sale here since late 2021 (initially in very limited numbers), the loniq 5 was Hyundai's first model based on their new E-GMP (Electric Global Modular Platform).

The loniq 5 was initially released here with a 72.6kWh battery offering rear wheel or all-wheel drive options.

With manufacturers now targeting charging speed as a key remaining impediment to EV adoption, the loniq 5 offers up to 11kW AC charging and 233kW maximum DC fastcharge rate. At that DC rate, the loniq can recharge 100km of range in just over 4.5 minutes.

Updates:

Late 2022:

- battery size upped to 77.4 kWh and Epiq version added.
- Service intervals increased to 24 months/30,000 km.

September 2023:

- Addition of 58 kWh, RWD 'Standard Range' option.
- Model option names changed to Ioniq 5, Dynamic and Epiq with associated trim and option revisions.
- Addition of N performance model with 84 kWh battery. Deliveries of the Ioniq 5 N to commence Jan 2024.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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 generally 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 rough 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:							
	NEDC	WLTP	EPA				
Variant	(Aust)	(Euro)	(USA)				
loniq 5 (58kWh)	Not rated	384	354				
loniq 5 (77kWh)	Not rated	507	488				
Dynamiq (2WD)	Not rated	476	488				
Dynamiq (AWD)	Not rated	454	428				
Epiq (2WD)	Not rated	476	488				
Epiq (AWD)	Not rated	454	428				
Ioniq 5 N (84 kWh)	Not rated	TBC	TBC				

Table 1: Driving range estimates for the Hyundai Ioniq 5

Using the US EPA range – a 2WD, 77 kWh base model loniq 5 would be capable of a return trip from the Melbourne GPO to Stawell in Victoria's mid-west, provided neither the heating nor air conditioning were heavily used. For this sort of trip, a short DC top-up charge in either Ballarat Central or Warrenheip (6.5 km east of Ballarat on the Western Highway) would be recommended. For further charging options and locations, visit: <u>https://www.plugshare.com/</u>



Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Ioniq 5 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers² as well as CCS2 DC fast-





CCS2 charging plug and socket

Notes:

- 1. <u>https://www.greenvehicleguide.gov.au</u>
- The loniq 5 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.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the Ioniq 5 is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

Charging rates:

Single phase: maximum of 7.4kW (32A) **Three phase:** 11kW (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. Charging times for the Ioniq 5 with the Standard Range (58/54 kWh usable) and Extended Range (77.4/74 kWh usable) battery packs are shown in table 2 below.

AC: 0 – 100% time				DC: 0 – 80% time	
10 A (power point)	15 A 1 phase (Caravan outlet)	32 A (1 ph. Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (250+kW)
58kW: 24h	15h	7.5h	5h	55m	15m
77kW: 37h	20h	10h	6.75h	1.5h	18m

Table 2: Approximate charging times for the Hyundai Ioniq 5

DC fast charging:

The Ioniq 5 uses the CCS2 DC fast-charge connector and can charge at up to 175 kW for the 54kWh battery and 233 kW for the 74 kWh version.

V2X capability:

The Ioniq 5 offers V2L functionality 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 an Ioniq 5, an 11kW AC charger would be needed.

However, depending on your existing power supply and/or charging needs, it may only be practicable to fit a lower rated EVSE. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 2.

Important notes for any home 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 is more than 20 years old. For more information on this item – see Fact Sheets at <u>EVchoice.com.au</u> or read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating: 5

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

- Seats up: 531 L
- Seats down: 1591 L

Front boot ('froot'):

• 57L (2WD), 24L (2WD)

Dimensions:

- Overall length: 4635 mm
- Overall height: 1605 mm
- Ground clearance: 160 mm
- Overall width (mirrors in): 1,940 mm
- Overall width (mirrors out): 2,152 mm

Battery:

- Standard Range: 58 kWh (54 usable)
- Extended Range: 77.4 kWh (74 useable)
- N Series: 84 kWh (80 ueable)

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 11 kW max.
- DC:
- 175 kW maximum (Standard Range)
- 233 kW maximum (Extended Range)

Charge port location:

• Right-hand rear.

Energy consumption: (WLTP)

- 16.7 kWh/100 km (RWD Standard Range)
- 17 kWh/km (base model, 2WD, Ext. range)

Kerb weight:

• 2095 kg

Drive configuration:

• Choices of rear or all-wheel drive.

Towing:

- 750 kg braked/750 kg unbraked. (Std. range)
- 1600 kg braked/750 kg unbraked. (Ext. Range)

Performance:

	Max. Power	0 to 100km/h	
Variant	(kW)	(Sec)	
2WD Std. Range	125	8.5	
2WD Ext. Range	168	7.3	
AWD	239	5.1	
Ν	478	3.4	

IMPORTANT NOTE:

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.