

**FRR 110-240**

**FRD 110-240**



#### WEIGHT RATINGS\*

<b>GVM</b>	<b>11,000 kg</b>
<b>GCM</b>	<b>16,000 kg</b>

#### ENGINE

<b>POWER</b>	<b>177 kW @ 2,400 rpm</b>
<b>TORQUE</b>	<b>765 Nm @ 1,600 rpm</b>

#### TRANSMISSION

<b>6 speed manual transmission (MT)</b>
<b>6 speed automated manual transmission (AMT)</b>

\* Refer to back page for detailed weight rating information

ISUZU CARE	
<b>WARRANTY</b>	6 Year Standard Warranty
	300,000 km / no hours stipulation
<b>ROADSIDE ASSIST</b>	6 Year Roadside Support
	24/7 Unlimited km
<b>HARSH APPLICATION WARRANTY (CONCRETE AGITATOR / GARBAGE COMPACTOR)</b>	3 Year Standard Warranty
	200,000 km / no hours stipulation
	3 Year Roadside Support
	24/7 Unlimited km

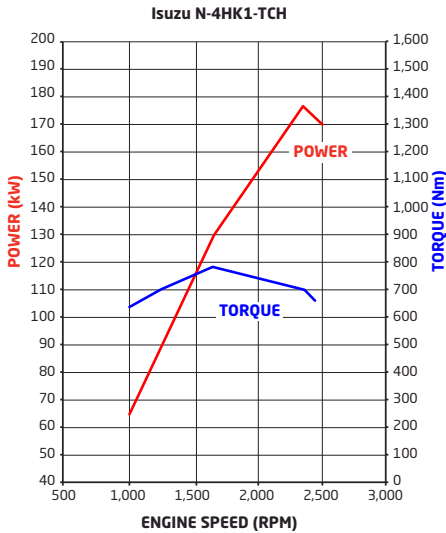
SERVICE AGREEMENTS			
OPTIONAL SERVICE PACKAGES	ESSENTIALS	ESSENTIALS PLUS	TOTAL
<b>SCHEDULED SERVICINGS</b>	●	●	●
<b>CONSUMABLES</b>		●	●
<b>ENGINE, TRANSMISSION &amp; DRIVELINE</b>			●
<b>EXTRAS</b>	After-hours Servicing, Glass, Fuel Card, Pickup - Dropoff		

INTELLIGENT SAFETY		
<b>ACTIVE SAFETY ADVANCED DRIVER ASSISTANCE SYSTEMS (ADAS)</b>	Advanced Emergency Braking	<b>(AEB)</b>
	Forward Collision Warning	<b>(FCW)</b>
	Distance Warning System	<b>(DWS)</b>
	Lane Departure Warning	<b>(LDW)</b>
	Electronic Stability Control	<b>(ESC)</b>
	Anti Skid Regulator	<b>(ASR)</b>
	Anti Lock Braking System	<b>(ABS)</b>
	Hill Start Aid	<b>(HSA)</b>
	Cab Tilt Warning	<b>(CTW)</b>
	Low light capable reversing camera	
<b>PASSIVE SAFETY CABIN OCCUPANT SAFETY SYSTEMS (COSS)</b>	Driver and front passenger airbags	
	Driver and front left hand passenger seatbelt pretensioners	
	ECE-R29 cab with side anti-intrusion beams	
	Door mounted cornering lamps	



Subject to the conditions outlined in the IAL New Vehicle Warranty. For further information please visit [isuzu.com.au](http://isuzu.com.au) or contact your local dealer.

ENGINE	
DESCRIPTION	Isuzu N-4HK1-TCH
TYPE	4 cylinder 16 valve SOHC
DISPLACEMENT	5,193 cc
COMPRESSION RATIO	16.5:1
BORE X STROKE	115mm x 125mm
POWER	177kW (240PS) @ 2,400 RPM (DIN NET)
TORQUE	765Nm @ 1,600 RPM (DIN NET)
INDUCTION	Low pressure turbocharger and high pressure Variable Geometry System (VGS) turbocharger sequentially operated and with air-to-air intercooler.
FUEL INJECTION	Direct injection high pressure common rail system. Exhaust pipe fuel injection for DPD regeneration
EMISSION CONTROL	Cooled EGR with exhaust Diesel Particulate Diffuser (DPD) . ADR 80/03 (Japan PNLT) compliant.
PTO (PTO MODEL ONLY)	Type: Constant mesh
	Rotation direction: Anticlockwise when viewed from rear
	Torque rating: 353Nm
	Ratio: 0.7



TRANSMISSION		
MT	CLUTCH	Type: Single plate with air assisted hydraulic control
		Clutch plate diameter: 352 mm
		Clutch lining area: 1,164cm <sup>2</sup>
	GEARBOX	Description: Isuzu MZW-6P
		Type: 6 speed with synchromesh on gears 2-6
		Ratios: 1st 2nd 3rd 4th 5th 6th Rev 6.615 4.095 2.358 1.531 1.000 0.722 6.615
AMT		Power Take Off facility: PTO provision on LHS of transmission case
		Other features: Air assisted shift, full pressure oil lubrication
		Description: Isuzu MZW-6P
		Type: 6 speed with both fully automatic and clutchless manual operation modes
		Ratios: 1st 2nd 3rd 4th 5th 6th Rev 6.615 4.095 2.358 1.531 1.000 0.722 6.615
		Power Take Off facility: PTO provision on LHS of transmission case. PTO drive from mainshaft gear
	Other features: Integrated automated wet clutch and torque convertor (TC) with lock up	

AXLES		
FRONT	Description:	Isuzu F041
	Type:	Reverse Elliot I-beam
	Capacity:	4,100 kg
REAR	Description:	Isuzu R077
	Type:	Single drive
	Capacity:	7,700 kg
		Ratio: 4.875 (SwB), 4.555 (except SwB)

SUSPENSION			
FRONT		Type:	Single stage alloy steel taper-leaf springs (except SWB)
			Single stage alloy steel multi-leaf springs (SWB)
		Other features:	Double acting hydraulic shock absorbers. Stabiliser bar.
REAR	FRR	Type:	Multi-leaf main spring, multi leaf helper spring
	FRD	Description:	Hendrickson HAS200
		Type:	Airbag
		Capacity:	9,000 kg at ground

BRAKES	
TYPE	Air over hydraulic dual circuit front and rear drum brakes.
DIAMETER X WIDTH FRONT	320 x 120mm
DIAMETER X WIDTH REAR	320 x 145mm
PARK BRAKE	Spring park brake acting on all rear wheels
AUXILIARY BRAKE	Air controlled exhaust brake

STEERING	
TYPE	Power assisted recirculating ball
GEAR RATIO	16.1 - 18.8:1
TURNS LOCK TO LOCK	4.1
WHEEL LOCK ANGLE	52° (inside wheel) / 39° (outside wheel)

WHEELS & TYRES		
FRONT	Wheels:	17.5 x 6.75 six stud steel wheels
	Tyres:	235/75R17.5 132/130M Michelin X Multi Z Tubeless
	Steer axle tyre rating:	4,000 kg
REAR	Wheels:	17.5 x 6.75 six stud steel wheels
	Tyres:	235/75R17.5 132/130M Michelin X Multi Z Tubeless
	Drive axle tyre rating:	7,600 kg
Spare: Spare wheel and tyre assembly supplied. Winch type carrier.		

CHASSIS FRAME	
TYPE	Cold rivetted ladder frame with parallel side rails.
MATERIAL	HT540A steel sidemembers
DIMENSIONS	Side rail (mm): 225x70x6.0 Rear frame width (mm): 840

FUEL TANK	
TYPE	Frame mounted steel fuel tank
CAPACITY	200L
FUEL CAP	Lockable

ELECTRICAL SYSTEM	
TYPE	24 volt
ALTERNATOR	90 amp
STARTER MOTOR	5.0 kW
BATTERY	2 x 115E41L (651 CCA) batteries connected in series
CAN BUS PROVISION	Underdash CAN system access plug for connection to a Fleet Management System (FMS) (not supplied)

## CABIN SPECIFICATIONS & APPOINTMENTS

CABIN GENERAL FEATURES	
ENGINE ACCESS	Manual cab tilt to 45° with torsion bar assistance
STEPS	Heavy duty anti slip steps
DOORS	90° opening internally reinforced front doors
MIRRORS	Heated and powered exterior main mirrors with flat glass & additional independantly adjustable convex "spot" mirrors
WIPERS	Two speed windscreen wipers with intermittent wipe mode
EXTERIOR LIGHTING	LED main beam & halogen high beam headlamp assembly with position lamp
	Roof mounted clearance lamps
	Front foglamps
AUDIBLE WARNING	Reverse alarm
GRILLE	Body coloured
FRONT BUMPER	Body coloured air dam type
SECURITY	Central locking with remote keyless entry & immobiliser

CABIN INTERIOR	
SEATING	Isri 6860/875 NTS air suspension driver's seat
	Front passenger adjustable bucket seat & front centre seat with folding seat back
SEATBELTS	3-point lap sash seatbelts in all outboard seating positions. Driver seatbelt integrated with driver seat. Centre seat lap belts.
STEERING COLUMN	Tilt/telescopic adjustable
ENTRY ASSIST GRIPS	Door & roof pillar mounted
DOOR WINDOWS	Electric control
STORAGE	Overhead compartments
	Twin cup holders
	Centre console box & storage tray
	Front door pockets
POWER OUTLET	24V cigarette lighter
AIRCONDITIONING	Manual control
INTERIOR LIGHTING	Fluorescent lamp

MYISUZU CO-PILOT AUDIO VISUAL UNIT	
SCREEN TYPE	10.1" 1080p High Definition with capacitive touch
OPERATING SYSTEM	Android Automotive
RADIO	AM/FM/DAB+
INTERNAL STORAGE CAPACITY	32GB
SMARTPHONE INTEGRATION	USB 3.0 socket
	Wi-Fi connectivity
	Android Auto / Apple CarPlay compatible
	Phone storage pocket

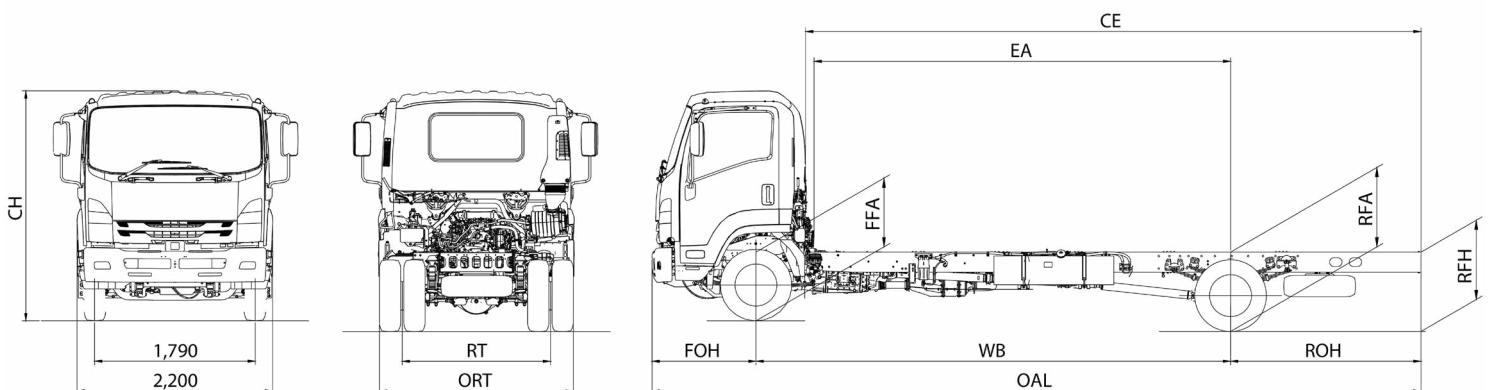
DRIVER CONTROLS	
SAFETY SYSTEMS	AEB on/off, DWS on/off/sensitivity adjust, LDW on/off/sensitivity adjust, ESC on/off, HSA on/off/sensitivity adjust
ENGINE	Idle stop system on/off (except SWB)
	idle speed control
	Cruise control
	DPD manual regeneration switch
TRANSMISSION (AMT ONLY)	Slow/fast gear engagement control, 1st gear start and normal/economy gear selection modes.
	Gear selection control with R-N-D and sequential shift positions
GENERAL CONTROLS	Headlamp on/off and levelling, windscreen wipers (2 speed and intermittent modes), washers, exhaust brake, turn signals

INSTRUMENTATION	
MULTI INFORMATION DISPLAY	AEB,FCW,DWS,LDW systems activation alerts
	CTW indicator
	Low engine oil level alert
	Vehicle systems status
	Low fuel level alert
	Fuel consumption information
	Service interval alerts
	Hourometer
	Adjustable vehicle speed warning
	Speedometer & tachometer
GENERAL INSTRUMENTATION	Digital odometer with integrated dual tripmeters
	Engine coolant temperature, fuel level and air pressure guages

WEIGHTS (kg)							
MODELS	RATINGS*		LOADING LIMIT* (at ground)		CAB CHASSIS WEIGHT #		
	GVM	GCM	FRONT	REAR	FRONT	REAR	TOTAL
FRR 110-240 SWB PTO	11,000**	16,000	4,000	7,600	2,260	1,185	3,445
FRR 110-240 MWB	11,000**	16,000	4,000	7,600	2,195	1,160	3,355
FRR 110-240 AMT MWB	11,000**	16,000	4,000	7,600	2,215	1,160	3,375
FRR 110-240 MLWB	11,000**	16,000	4,000	7,600	2,215	1,165	3,380
FRR 110-240 AMT MLWB	11,000**	16,000	4,000	7,600	2,235	1,165	3,400
FRR 110-240 LWB	11,000**	16,000	4,000	7,600	2,230	1,205	3,435
FRR 110-240 AMT LWB	11,000**	16,000	4,000	7,600	2,250	1,205	3,455
FRR 110-240 XLWB	11,000**	16,000	4,000	7,600	2,270	1,200	3,470
FRR 110-240 AMT XLWB	11,000**	16,000	4,000	7,600	2,290	1,200	3,490
FRD 110-240 AMT XLWB	11,000**	16,000	4,000	7,600	2,255	1,290	3,545

\* Vehicle ratings and front/rear weight limits are subject to government regulatory requirements and weight distribution analysis. Consult your Isuzu dealer to select the correct vehicle for your specific application. \*\* Optional 8,000kg GVM rating available. # Cab chassis only as supplied and including 10 litres of fuel.

DIMENSIONS (mm)													
MODELS	WB	OAL	FOH	ROH	EA	CE	RT	ORT	CH	FFA (unladen)	RFA (unladen)	RFH (unladen)	TURNING CIRCLE KERB TO KERB (m)
FRR 110-240 SWB PTO	3,790	6,555	1,170	1,595	3,020	4,830	1,660	2,170	2,605	730	905	960	12.0
FRR 110-240 MWB	4,060	6,975	1,170	1,745	3,430	5,250	1,660	2,170	2,595	720	895	960	12.9
FRR 110-240 MLWB	4,660	7,875	1,170	2,045	4,030	6,150	1,660	2,170	2,595	720	890	970	14.8
FRR 110-240 LWB	4,990	8,325	1,170	2,165	4,360	6,600	1,660	2,165	2,585	720	885	965	15.9
FRR 110-240 XLWB	5,320	8,625	1,170	2,135	4,690	6,900	1,660	2,165	2,585	725	895	965	16.9
FRD 110-240 XLWB	5,320	8,625	1,170	2,135	4,690	6,900	1,660	2,170	2,595	720	820	860	16.9



PERFORMANCE (calculated - typical paved road)				
		GEARED SPEED~ (top gear at peak power engine rpm)	LOW SPEED GRADEABILITY (lowest forward gear assuming no wheel slip)	ENGINE SPEED (top gear at 100 km/h)
FRR/FRD 110-240	at 11,000kg GVM (SWB)	100 km/h @ 2,400 RPM	53%	2,410 RPM
FRR/FRD 110-240	at 11,000kg GVM (except SWB)	107 km/h @ 2,400 RPM	72%	2,255 RPM

\* Maximum speed achievable depends on vehicle frontal area as well as other factors. Consult your Isuzu dealer for more detailed information.

ORDER CODES	
Models	Codes
FRR 110-240 SWB PTO	FH-FRREE-A22
FRR 110-240 MWB	FH-FRRED-B22
FRR 110-240 AMT MWB	FH-FRRED-G22
FRR 110-240 MLWB	FH-FRRED-D22
FRR 110-240 AMT MLWB	FH-FRRED-Z22
FRR 110-240 LWB	FH-FRREP-D22
FRR 110-240 AMT LWB	FH-FRREP-Z22
FRR 110-240 XLWB	FH-FRRED-E22
FRR 110-240 AMT XLWB	FH-FRRED-J22
FRD 110-240 AMT XLWB	FH-FRDED-J22

Subject to the conditions outlined in the IAL New Vehicle Warranty, Isuzu F series models carry a standard factory warranty which covers the owner for the first 72 months or 300,000 kilometres, no hours stipulation. All Isuzu warranties are subject to mandatory prescribed terms under Australian Consumer Law including consumer guarantees. Harsh Conditions variations to standard factory warranty may apply. For more details visit the Isuzu website at [www.isuzu.com.au](http://www.isuzu.com.au) which explains Isuzu warranties in more detail, or alternatively contact your local Isuzu Truck dealer. All warranties commence from date of initial delivery.

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