



KT300e Mine Utility Vehicle

GENERAL SPECIFICATIONS

Height *	6 ft. 7.5 in. (2.02m)
Width *	7 ft. 4.5 in. (2.25m)
Length *	17 ft. 5.5 in (5.33m)
Seating Capacity (Including Operator) *	2 (Regular Cab) 5 (Crew Cab)
Inner Turning Radius *	14 ft. 8 in. (4.48m)
Outer Turning Radius *	24 ft. 11 in. (7.59m)
Gross Vehicle Mass (GVM) *	13000 lbs (5897 kg)
Deck Carrying Capacity *	2600 lbs (1200 kg)
Rear Deck Size *	Width = 6 ft 2 in. (1.9m) Length = 7 ft. 2.5 in. (2.2m)
Ground Clearance*	11.8 in. (301mm)
Wheel Base*	10 ft. 4 in. (3.32m)
Maximum Recommended Operating Grade*	20%
Noise Level (@ Operator's Seat)*	65 dBa
Operator's Compartment (Open Cab / ROPS / FOPS / Environmental Cab)*	ROPS / FOPS
Air Conditioning System	Optional
Maximum Ambient Operating Temperature	122 deg. F (50 deg. C)

* Based on machine configuration

DRIVETRAIN

Front Axles	Dana
Rear Axles	Dana
Front Axle rating , Dynamic	5000 kg.
Rear Axle rating, Dynamic	5500 kg.
Front Differential Type	Open/Limited Slip / No Spin
Rear Differential Type	Open/Limited Slip / No Spin
Transmission (If Equipped)	Dana 360 drop box

BRAKES

Service Brakes	Full enclosed (Wet Disc) / Piston actuated
Secondary (Emergency) Brake	Fully enclosed, spring applied / hydraulic release (SAHR) wet disk brakes
Park Brake (D/Line or inter, wet or dry)	Fully enclosed, spring applied / hydraulic release (SAHR) wet disk brakes
CAN/CSA-M424.3-90 Certified	Yes

TIRES

Tire Size	275/80R20
Radial or Bias Ply	Radial
Tire Rating (Number of Ply/ Star Rating)	22 Ply
Thread Type (Smooth or Lug)	Lug

AUTOMATION AND TECHNOLOGY

Wireless telemetry capability to transfer carrier and BEV Data	Yes
Collision Avoidance Compatible	Yes
Camera System	Optional

TRACTION MOTOR(S) & POWER CONVERSION SYSTEM

Motor Type (induction, brushless DC, etc...)	Brushless permanent magnet
Number of Motors, Arrangement	Single motor, transfer case / drop box
Motor Rated Voltage	750V
Motor Rated Amps	270A max
Motor Rated Power (Continuous / Peak)	140kW / 250 kW
Motor Cooling Method	liquid
Power Conversion System Type	3 phase HV inverter / IGBT
Power Conversion System Input Voltage Range	750VDC
Power Conversion System Output Voltage Range	750V
Power Conversion System Maximum Current	425
Capable of regenerative braking?	Yes
Braking Resistor (Make / Model / Size)	60kW
Power Conversion System Cooling Method	Liquid

SPEEDS (LOADED)

0% Grade (flat)	35 km/h (electronically limited)
5% Grade	35 km/h (electronically limited)
10% Grade	35 km/h (electronically limited)
15% Grade	35 km/h (electronically limited)
20% Grade	35 km/h (electronically limited)

RANGE (LOADED)

On +20% Grade	21 km
On +15% Grade	32 km
On +10% Grade	40 km
On +5% Grade	51 km
On 0% Grade (flat)	80 km
On -5% Grade	indefinite - regen / braking resistor
On -10% Grade	indefinite - regen / braking resistor
On -15% Grade	indefinite - regen / braking resistor
On -20% Grade	indefinite - regen / braking resistor



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BATTERY

Cells Chemistry	Lithium Nickel Manganese Cobalt oxide
Cells Rating	126Ah (Energy cells) to 108Ah (Power cells) optional
Pack voltage	650V nominal
Pack energy capacity - total	77kWh (Energy) to 67kWh (Power) optional
Pack energy capacity - useable	61.6 kWh to 53.8 kWh
Pack safety systems	Over/undervoltage, over/under temperature, overcurrent, welded contactor check, over-discharge
Cell cooling method (liquid or air)	Liquid
Operating temperature limits (ambient)	-20C to 50C
Battery Pack Weight	620kg
Battery Pack Dimensions	330mm x 840mm x 2300mm

EXPECTED LIFE	DEPTH OF DISCHARGE (%) / CYCLE LIFE (no.)
	100% DOD: 3000 (Energy) – 4000 (Power)
	80% DOD: 4000 (Energy) - 10000 (Power)

Charging Current (A), Voltage (V)	140A / 700V (energy) to 420A / 700V (power)
Maximum Charging Rate (kW)	100kW (energy) to 275kW (power)
Charge Rate (i.e. C2)	1C (energy) to 2C (power)
Charge time (0-100%) (min)	148 min standard pack, onboard 25kW charger
Expected Run Time on 1 Full Charge	6 hrs

CHARGER

Equipped with Onboard Charger	Yes
Onboard Charger: Rating	25 kW onboard standard (optional 50kW onboard)
Onboard Charger: Input Voltage/ Phases	400-600-1000 VAC, 3ph, 50-60Hz
Onboard Charger: Connector Type	Meltric, optional SMS 8340 Series Uni-Lock Lever-Action, other options available, J1772 level 2
Equipped with Offboard Charging Capability	Yes - optional, CCS Type 1 / Type 2