ROCCARO Target vs. EM-5 Pro Published Specification

Proposed engineering targets. Final production specifications are subject to validation and may change.

Measure	ROCCARO target	EM-5 Pro published specification
Motor peak power	**9 kW target** 61% more peak power versus 5.6 kW	60V 5,600W geared motor; marketing banner states “up to 6,000W”
Rated power	**5 kW target** 100% more rated power	60V 2,500W
Maximum torque	**300 N·m rear-wheel torque target** 25% more target torque	177 lb-ft / approximately 240 N·m; measurement location not defined
Acceleration	**0–50 km/h in 2.7 seconds or less target**	4.8 s published; interval not defined
Top speed	**90 km/h / 56 mph target** Approximately 7% higher target top speed	52 mph / approximately 84 km/h
Controller maximum current	**150A FOC controller target** 88% higher target current	80A
Maximum climb	**48° target; test conditions to be defined** 3° steeper target	45°
Range	**Up to 105 km at 35 km/h under controlled conditions** Different test conditions prevent a direct range claim	59 miles curb range; marketing banner states up to 70 miles
Battery	**72V 35Ah** 30% higher capacity (Ah)	60V 27Ah
Charger	**1.8 kW smart charger target**	67.2V / 5A CE-certified charger
Charging time	**Approximately 50 minutes, 20–80% target**	7–8 hours
Riding modes	**Eco, Trail, Sport, Boost, and Custom** Five proposed modes versus three	26 / 40 / 52 mph
Drivetrain	**Chain**	Chain
Front suspension	**Fully adjustable inverted fork, 200 mm travel target** Longer target travel	Front hydraulic shock absorbers, 5.9 in / approximately 150 mm stroke
Rear suspension	**Adjustable piggyback shock, 190 mm travel target** Longer target travel	Rear adjustable air dampers, 2.0 in / approximately 51 mm stroke
Water protection	**Complete bike IP66; battery / controller IP67 target** Added dust-protection target	IPX6
Rider age	**18+ (market guidance to be confirmed)**	18+
Seat height	**Approximately 830 mm target**	31.5 in / approximately 800 mm
Wheels	**17-inch front / 14-inch rear**	17-inch front / 14-inch rear
Wheelbase	**Approximately 1,090 mm target**	41.7 in / approximately 1,059 mm
Handlebar width	**Approximately 720 mm target**	27.2 in / approximately 691 mm

Measure	ROCCARO target	EM-5 Pro published specification
Maximum load	**150 kg target** Approximately 15% higher target load	287 lb / approximately 130 kg
Frame material	**Reinforced 6061-T6 aluminum** Aluminum chassis instead of steel	Steel
Product size	**To be confirmed**	65.7 × 27.6 × 41.3 in
Net / gross weight	**59 kg or less curb weight target; gross to be confirmed** Target approximately 5.9 kg lighter	143 lb / 161 lb (approximately 64.9 / 73.0 kg)
Certificates	**Market-specific certification to be confirmed**	CE / UL / GCC
Quantity per carton	**To be confirmed**	1 pc
Packaging dimensions	**To be confirmed**	55.5 × 13.8 × 25.2 in
40HQ container quantity	**To be confirmed**	197 pcs
Display & lighting	**4-inch color TFT display; LED headlight standard** Proposed color display and standard headlight	LCD display; headlight listed as optional; horn
Battery energy	**2.52 kWh** 56% more battery energy	Approximately 1.62 kWh (calculated)
Brakes	**Four-piston hydraulic, 220 mm rotors**	Hydraulic; caliper and rotor details not published
Rider control	**Adjustable regeneration, switchable traction control, reverse assist, and hill hold** Advanced rider controls	Not listed
Connected security	**Bluetooth app, GPS, OTA, NFC key, tracking, motion alarm, ride data, and service reminders** Connected security	Not listed
Warranty	**2 years motorcycle / 3 years battery target**	1 year

The first 29 rows follow the official Valtinsu EM-5 Pro specification table in its published order; ROCCARO-focused additions follow afterward. Metric conversions and the 1.62 kWh battery energy (60V × 27Ah) are calculated. Banner peak-power and range claims differ from the specification table; acceleration and range test conditions are not defined. All ROCCARO figures are proposed development targets, not validated production specifications, guarantees, or an offer for sale. Source: valtinsusport.com EM-5 Pro product page, checked 24 Sep 2026.