

	Item	Rationale	Model 1	Model 2	Model 3	Model 4
			Unimog 435	Unimog 435 DOKA	Unimog 435 L37	MAN KAT1 (Bison)
	Base vehicle					
1	Wheel base (mm)		3250	3250	3700	various
2	Engine size, power (kw with/without turbo)		6 litre, 96/128	6 litre, 96/128	6 litre, 96/128	various
3	Turbo fitted (if not available on standard unit)	30% increased power	Optional	Optional	Optional	n/a
4	Intercooler kit fitted	25% increased torque	Optional	Optional	Optional	n/a
5	Torque/ (effective with lowest gearing)					
6	Gears - 4 High, 4 Low (reverse on all low gears)		√	√	√	6
7	Ground clearance (with 12.5 tyres). mm		44	44	44	41
8	Maximum entry angle		46	46	46	
9	Escape (Departure) angle		51	51	51	
10	Maximum gradient, %		70%			60%
11	Maximum side slope, degrees		42	42	42	40
12	Preparation for 4WD or diff locks	Switch on the move	NONE	NONE	NONE	NONE
13	Wading depth (Recommended, Limit) m		1.2/1.9	1.2/1.9	1.2/1.9	1.2/1.9
14	Preparation before/after wading		NONE	NONE	NONE	NONE
15	Off-road ability		EXTREME	EXTREME	VERY GOOD	GOOD
16	Tyre pressure adjustment system		Manual	Manual	Manual	Manual
17	Max speed (km/h)		86	86	105	90
18	Suspension - coil spring (30 degree opposite twist)		√	√	√	
19	Frame twist (degrees)		15	15	15	RIGID
20	Working of diff locks, front, back and between axles		√	√	√	
21	Fuel pre and main filters		√	√	√	
22	Larger tyres (14.5x20)	Increased ground clearance, increased speed (to 90 km/hr)	√	√	√	n/a
23	Hi drivers cab	More comfort, increased options for living space	X	X	√	n/a
24	'Fast Axles'	Increases maximum cruise speed to 100 km/hr	X	√	√	n/a
25	Snorkel fitted (if missing)	Needed for fording greater than 1.5 meters	√	√	√	n/a
26	Front underbody protection plate	Not fitted as standard on all	√	√	√	n/a
27	Up-rated alternator (100 amps)	Basic requirement to avoid straining standard unit (especially when electric winch fitted)	√	√	√	n/a

28	Second alternator (not with mechanical A/C)	Back-up in case of main unit failure	Optional	Optional	Optional	n/a
29	ISRI driver/co-driver mechanical sprung seats	Basic seats not so comfortable for long journeys in rough terrain	√	√	√	√
30	ISRI driver/co-driver air sprung seats	Additional features included, included seat heating	Optional	Optional	Optional	Optional
31	Truck double tone air horn	Standard unit does not differentiate size of vehicle	Optional	Optional	√	√
32	Front waist lights	Already available or easily fittable on Unimogs and many base vehicles	√	√	√	X
33	Chassis mounted army style jerry can holders	Useful for Unimogs either as jerry can holders (for generator fuel etc.)	Optional	Optional	Optional	Optional
34	Custom made external storage boxes	Need to use every all possible spaces for storage	√	√	√	√
35	Renovated/painted chassis	Sourced vehicles of 30 years age, often with near zero rust, but increases longevity of base	√	√	√	√
36	Trailer hitch (Ringfelder etc.)	To extend periods between supply locations and/or take additional loads	√	√	√	√
37	Renovated/painted drivers cab	Especially to extend internal colours into drivers cabin, as part of a general upgrading or addition of new features (12/230V converters, coolbox,	√	√	√	√
38	Tilt meter	Not as accurate as the 'seat of the pants', but	Optional	Optional	Optional	Optional
39	Satellite navigation	Enhanced versions with off-road features and	Optional	Optional	Optional	Optional
40	Searchlight	Standard issue on fire brigade and THW sourced	Optional	Optional	Optional	Optional
Base Vehicle Additions						
41	Tyre-wheel winch (custom, electric)	Needed, as original tyre location no longer possible, and each unit weighs typically 90 kg	√	√	√	√
42	2 spare wheels	1 insufficient for an expedition fahrzeug (3 too heavy)	√	√	√	√

43	Second vehicle battery (reserve start plus winch) plus custom Aluminium box enclosure	Electric winch requires	√	√	√	√
44	Cut-off / isolation switches to both 'vehicle' batteries (German army spec)	Additional security / back-up in case of charging and/or battery problems	√	√	√	√
45	Full roof rack (with branch guard)	Less than 7.5 tonne 4WD vehicles are always short of storage space - can serve as additional/alternative sleeping space on DOKA based rigs	Optional	√	√	√
46	External roof mounted large storage locker		Optional	Optional	Optional	Optional
47	Customised/adapted roof track (i.e. to support a canoe etc.)		n/a	√	√	n/a
48	12v on roof rack	Good for search lights /TV etc.	Optional	√	√	√
49	Additional truck forward lighting (high mounted)	Always useful for additional lighting on difficult terrain during night driving	Optional	√	√	√
50	Long range diesel tanks (400+ litres)		√	√	√	Note 1
51	12 tonne electric winch (front) - some model 4's may have mechanical or hydraulic rear winch from		Optional	√	√	mech.
52	Electric winch (rear) - some model 4's may have mechanical or hydraulic rear winch from base vehicle		Optional	Optional	Optional	n/a
53	Compressed air line		Optional	Optional	Optional	
54	Airline style' loading/attachment strips	Useful for temporary or near permanent attachments	√	√	√	√
55	Front 230v generator		Optional	Optional	Optional	Note 2
56	Radio/DVD/reversing display (drivers cab)		√	√	√	√
57	Checkerplate Aluminium External storage boxes		√	√	√	√
	Living space(s)					
58	Empty cabin, Inner dimensions (WxLxH) metres		2.15x4.3x1.9	2.15x4x1.9	2.25x3.3x1.9	various
59	Self-supporting composite wall construction of between 48 and 60 mm		std 48mm	std 48mm	std 48mm	std 48mm
60	Thicker walls (60mm), standard 40mm	Insulation rating 1,5 m ² K/W (48 mm) 2,2 (60 mm)	Optional	Optional	Optional	Optional
61	Chunky Resin based edging/corner strengthening supplemented by aluminium checkerplate sheeting		√	√	√	√

62	Frame - 3 point attachment	3-point kinematic attachment with main and flex mounts for stress-free body coupling to the torsion elastic	√	√	√	n/a
63	Flexible walled tunnel with closing door		√	√	√	X
64	Entrance door with lowered/recessed stainless steel handle		√	√	√	√
65	Hardened entrance door (with vertical bolts)		Optional	Optional	Optional	Optional
66	3 side windows, 2 roof windows and 2 access doors to storage		√	√	√	√
67	High & low cupboards in kitchen, bedroom, bathroom areas with choice of colour (constructed in 8mm plywood, plus steel frames for seating) including wardrobe and choice of doors/shelves versus bins, with aluminium edging					
68	Beds with 1 double converting from sofa (choice of covering fabric)		2+2	2+3	6	2 to 8
69	Safety deposit box		Optional	Optional	Optional	Optional
70	Calorifier (marine spec)	Avoids need for switching on diesel unit (and waiting for water to be heated), in winter leaves diesel unit free to hit interior (a full tank available within less than 1 hour of driving), also backup in case of failure of	Optional	Optional	Optional	Optional
71	Heating/drying radiator	Diesel heater over-powered for space, will effectively dry clothes hanging in shower compartment without radiator, but radiator off engine heating avoids need for rear unit to be on during travelling (useful re-use of	Optional	Optional	Optional	Optional
72	3 burner hob and oven (gas)	2 hobs often inflexible - oven offers additional	√	√	√	√
73	3 burner hob and oven (diesel)	Marine spec.	Optional	Optional	Optional	Optional

74	Large 3-way fridge (gas, 12v, 230v)	Always needed whether for a larger group and/or extended journeys	√	√	√	√
75	3-way Freezer (gas, 12v, 230v)	Useful for longer trips in regions where reasonable food sources are	Optional	Optional	Optional	Optional
76	Mechanical Air Conditioning (only whilst driving)	A/C when not driving not realistic option for <7.5 tonne	Optional	Optional	Optional	Optional
77	12v to 230v converter (to 2kw)	Many everyday useful items require (laptops, hair dryer), and for reasonably low wattage items is reasonable to convert from 12 volts (especially during transit)	√	√	√	√
78	Increase converter rating (to 5kw)	Some customers may have additional demands for 'on the move' 230V	Optional	Optional	Optional	Optional
79	Drivers Cab sound proofing kit	Significantly reduces noise of driving	Optional	√	√	X
80	Under bonnet sound proofing	Engine mats assist noise reduction especially in Unimog based vehicles (and when used in conjunction with sound deadening floor an in-cab mats	Optional	Optional	√	X
81	Heat insulation in drivers cab	Required mainly when cab also used as living-sleeping area (i.e. for DOKA	X	√	√	X
82	Additional wide angle rear view mirror	Base vehicle does not include	√	√	√	√
83	Kerbside mirror	Increased length and height of vehicle makes even more useful	√	√	√	√
84	Radio-DVD player	Missing in base vehicle	√	√	√	√
85	Reversing Camera	Useful also for	Optional	√	√	√
86	Custom s/steel entrance ladder	Avoids problems from contact with ground (no noise associated with movement of vehicle	√	√	√	√
87	Additional individual seats in rear of front cab		n/a	√	√	X
88	Additional seat-belted seats in rear living cabin		√	√	√	√

89	Painted living box (& drivers cab)	Extend colour theme from rear, use as opportunity to renovate any damage/rust spots	√	√	√	√
90	External shower (2 sides)	Useful for washing of clothes, cleaning teeth, and in warmer months for a shower	√	√	√	√
91	Internal shower and basin	Shares shower attachment	√	√	√	√
92	Diesel heater (water and air) - 4 kw (larger optional for model 4)	Heating cabin and HOT WATER	√	√	√	√
93	Truma Gas radiator	For that instant noiseless atmospheric heating	Optional	Optional	Optional	Optional
94	Standard water filter		√	√	√	√
95	Sureflow water pump (standby included in		√	√	√	√
96	Gas fired grill/oven		√	√	√	√
97	Microwave		Optional	Optional	Optional	Optional
98	External gas socket		Optional	√	√	Optional
99	12v extractor in bathroom and kitchen area		√	√	√	√
100	Main fusebox/controller with level gauges, voltmeter etc.		√	√	√	√
101	Water filtration system (membrane technology)	Safe handling of poor water quality	Optional	Optional	Optional	Optional
102	4-way speakers in living cabin		Optional	√	√	√
103	Light strips around roof windows	Efficient low level background lighting	√	√	√	√
104	Custom beds (rear usually form table base), inter-changing with living room sofas		√	√	√	√
105	220 litres clean water tanks (Backup up water pump carried but not fitted)	Useful minimum	√	√	√	√
106	Additional fresh water tanks		√	X	X	√
107	Grey water tank (60 litre)	Useful in some inner-town locations and/or protected/nature parks, where direct leaking to road/ground not	√	√	√	√
108	12v Macerator porcelain toilet (60 litre tank)	Provides more capacity than cassette toilets, avoids need to have external access	√	√	√	√
109	Solar charging with regulator	Required given diesel heater and	200W	200W	300W	400W

110	270 degree awning plus LED lighting	10sq m from only 2.6 m length external storage and offers 2 different positional aspects (help deal with movement of sun)	√	√	√	√
111	Generous fitting of 12v, 230v and USB sockets in front and rear cabins		√	√	√	√
112	AGM 100 A hr batteries		1	2	2	2 to 4
113	Vented/separated chamber for 1 11 kg propane gas bottle with piping, access etc.		√	√	√	√
114	TV-DVD player		Optional	Optional	Optional	Optional
115	Cabin Sound system		Optional	Optional	Optional	Optional
116	Satellite receiver & dish		Optional	Optional	Optional	Optional
117	Burglar alarm		Optional	Optional	Optional	Optional
118	Large opening 'panoramic' window panel		√	√	√	√
120	Real glass windows (only with 60 mm walls)		Optional	Optional	Optional	Optional
121	External entrance lights (LED's)		√	√	√	√
122	Custom between seats storage unit		Optional	Optional	Optional	Optional