

The total length of the rig is 3.83 meter.

The trike is 2 meter long, 0.8 wide, 1.38 high and weights ~ 40 kg, (8.4 kg front, 15.15 kg right and 16.1 kg on left wheel)

It has a 24 volt, 250 watt motor and 150 Wh akku (used more like a capacitor than Akku)

Motor is behind the axle consequently slack side is on top and tight side at bottom

The two serial configured (24v) 50 watt solar panels manage about 70 watt with the flat installation.

The delta trike has 11 gears with a 11-51 Teeth cassette (gear range of 463%) and 32 Teeth front chain-ring, 170 mm crank length.

About 12° negative wheel camber, with Bin Ben Plus Tires 20x2.15" 55-406 ∅ 52 cm

Motor or pedalling, max speed is only about 23 km/h (can't find the right sprocket, but it's ok)

Without E-support and trailer a 17.6% slope (10°) is doable with the second gear.

The seat has a 9 coil-spring base then two layers of jute fabric, 6 cm foam, 4 cm upholstery wadding and is covered with water-repellent 100% Hemp covering.

The Chain is Waxed not Oiled to keep the Bike, Hands clean and better for chain and environment.

The trailer is 1.41 meter long, 0.8 wide, 0.85 high (86.5 with Solar-panel) 153 cm when unfolded Shaft length 0.43 and the trailer weights 40kg (can be made lighter, 15 mm full axle can be 12 mm pipe, lower sides, frond and back are beech wood...) The roof has a 4mm Polycarbonate insulation. Tyres Marathon Plus 20x1.75", 47-406 ∅ 50.4 cm

Assuming a cw value of 1.2 and Air density of 1.2 kg/m<sup>3</sup>, travelling at 15 km/h with 15 km/h head wind the trailer having a front area of 0.454 m<sup>2</sup> needs 189 Watts to move it, plus Trikes resistance.

$$0.5 * 1.2 * 1.2 * (8.33 * 8.33) * 0.454 * 30000 / 3600 = 189 \text{ W}$$

with 15 km/h wind from rear and trailer erected the wind pushes at 46 Watt (with ~ cw 1.1 flat wall)

$$0.5 * 1.1 * 1.2 * (4.17 * 4.17) * 0.977 * 15000 / 3600 = 46.7 \text{ Watt}$$

Moving at 15 km/h with erected trailer and slopping roof cw-value of ~ 0.7

$$0.5 * 0.7 * 1.2 * (4.17 * 4.17) * 0.977 * 15000 / 3600 = 29.7 \text{ Watt}$$

The trailer pushes at 17 watt and the trike/driver estimating some 40 – 60 watt air resistance force.

Weights	kg	Storage space	m <sup>3</sup>
Trike inclusive motor, akku, solar, roof	40.00		
Trailer	40.00	Rear boot	0.25*0.76*0.3
Trailer Akku	5.00	Kitchen	0.25*0.76*0.4
Solar Panel	3.50	Front Pocket	0.25*0.76*0.155
DRÖMMANDE Mattress	7.90	Cloths Storage	0.25*0.525*0.55
Petrol Cooker 2117 W	0.56	Inside	1.4*0.17*0.055
10A Battery Charger	0.50		<b>0.247</b>
Frying Pan * Lit	1.00		
300 Watt Inverter	0.75	Plus some in	
Velox Mocca Maker	0.50	Roof-dome and	
2 Tarps	3.10	rear of Trike	
All Storage boxes	4.00		
	<b>106.81</b>		

Plus my weight (~68kg) spares, tools, clothing, breakfast, (fresh main meal daily form village shop)

The staining is done with used coffee grounds and then covered with Teak oil.

Trailer and Trike Batteries are LiFePo<sup>4</sup> (640 wh and 150 Wh on Trike)

The trailer is not a cycle-camper, it is the very definition of a “Pennbox” (Sleeping-box).  
I am a traveller and rest when it is necessary to do so.  
Camping is a privilege, resting a basic human right like eating and drinking. No Human would ever intentionally disturb another human at his rest, only persons will do such a thing, acting on behalf of someone/something.  
Next years model be lighter and focused on comfort with a totally new design.  
As always flying high the Freedom Flag.

Ready to go:



Arrived save, time for rest:



Set up:



Glimpse inside without the 17 cm wide awning attached.  
Requires some technique to get in, but love my pocket sprung mattress with coconut fibre.



Posting on forum with healthy dose of Vermouth MATA HARI, a real wormwood Absinthe



Oh what a lovely day:



Time to go, place is as clean or cleaner as at arrival.

