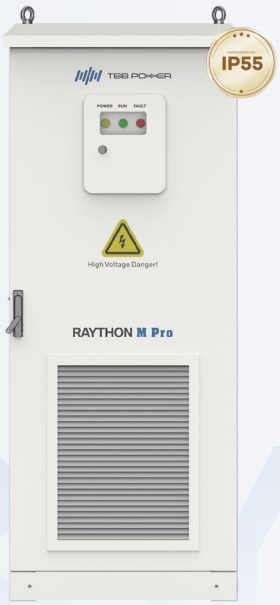
Raython M series

All-in-One Energy Storage System

For Off-Grid Applications



Raython M10 Pro

10kW | 20.16kWh-40.32kWh

Raython M15 Pro

15kW | 30.24kWh-40.32kWh

TBB Raython M Series is an all-in-one, standalone solar power system designed to address energy challenges faced by homes and businesses without grid access. Featuring a highly integrated design, the Raython M Series enables fast installation and effortless commissioning.

Exceptional Performance

- All-in-one design
- Factory assembled and tested
- Off-grid inverter with built-in MPPT supporting up to 900Voc
- Auto Generator Start/Stop (AGS) functionality
- Power Control & Power Assist functions

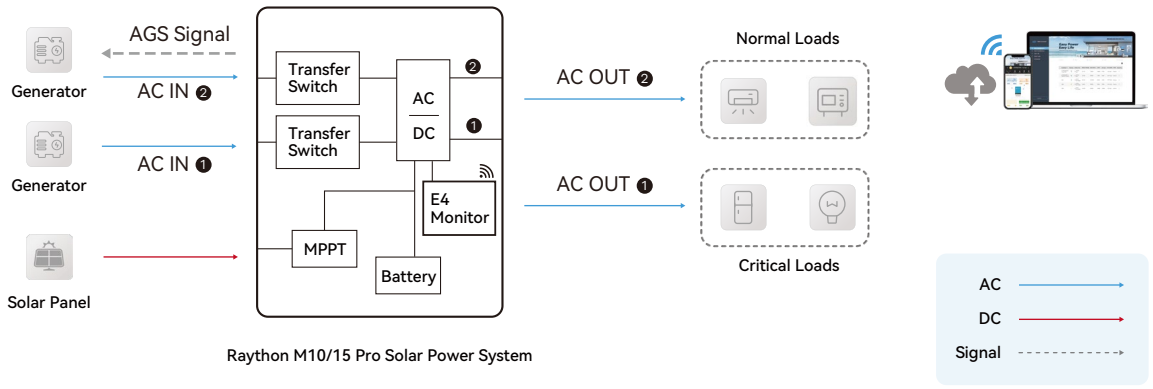
Enhanced Reliability

- 0ms UPS transfer time
- 300% surge capability
- IP55 protection
- Built-in air conditioning ensures batteries operate within the recommended temperature range
- Enhanced safety with an integrated fire suppression system

Increased Flexibility

- 4 MPPT trackers
- Two AC inputs & two AC outputs
- Local monitoring and control via E4 LCD Monitor
- Remote monitoring and control via NOVA Web & App

System Schematic for Raython M10/15 Pro



Raython M10/15 Pro Solar Power System

Model	Raython M10 Pro	Raython M15 Pro
AC Input		
Generator compatible	Yes	
Power assist	Yes	
Grid feedback	Yes	
AC input voltage range (VAC)	175~265	
AC input frequency range (Hz)	45Hz~55Hz@50Hz (normal), 55Hz~65Hz@60Hz (normal)	
AC input current (transfer switch) (A)	2x100	
Inverter		
Product topology	Transformer based	
Nominal battery voltage (VDC)	48	
Input voltage range (VDC)	42~68	
AC output voltage (VAC)	220/230/240 ±2%	
AC output frequency (Hz)	50/60 ± 0.1%	
Harmonic distortion	<2%	
Cont. output power at 25℃ (VA)	10000	15000
Peak power (30min) (W)	10000	15000
Cont. output power at 25℃ (W)	8000	13000
Cont. output power at 40℃ (W)	7000	10000
Surge	300%	
Maximum efficiency	96%	
Zero load power (W)	40	60
Max AC charge current (A)	140	200
Main output (AC Out1) current (A)	100	100
Transfer time	0ms (<15ms in weak AC source mode>)	
Solar Charge Controller		
Max output current (A)	300	400
Maximum PV open circuit voltage (V)	600	900
Start-up voltage (V)	120	160
Maximum charge Power	17500W @ 57.6V total, 5000W @ 57.6V per tracker	23000W @ 57.6V total, 8000W @ 57.6V per tracker
PV operating voltage range (V)	120~600	160~900
MPPT voltage range (V)	80~525	80~720
Number of MPPT trackers	4	4
Maximum PV input current per tracker (A)	20+20+20+20	20+20+20+20
Maximum PV short circuit current per tracker (A)	25+25+25+25	25+25+25+25
Allowable maximum PV panel power per tracker (W)	8000+8000+8000+8000	10000+10000+10000+10000
Maximum efficiency	97%	
MPPT efficiency	> 99.9%	
Battery		
Battery type	LiFePO4 Li-ion battery	
Nominal energy capacity	20.16kWh-40.32kWh	30.24kWh-40.32kWh
General Data		
General purpose com. port	Wi-Fi with E4 LCD monitor	
Operating temperature range	Inverter: -20˚C to 65˚C / Battery: discharge -20˚C to 55˚C, charge 0˚C to 55˚C	
Relative humidity in operation	95% without condensation	
Altitude (m)	2000	
Mechanical Data		
Dimension (W*D*H) (mm) (max)	820*1210*2040 (including lifting rings)	
Cooling	Battery Compartment: Air conditioning; Electrical Compartment: Temperature controlled forced air cooling	
Protection index	IP55	
Standards		
Safety	EN-IEC 62477-1, EN-IEC 62109-1,EN-IEC 62109-2,EN-IEC 62040-1	
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4	

Raython M

All-in-One ESS

