taylor.

PRODUCED BY

FOX ESS

all-in-one energy storage system

PQ1

Single-phase hybrid / AC

Tested and supported (1st/2nd line) by Taylor

9.84 kWh battery capacity scalable up to 29.52 kWh

Plug and play modular installation

Compatible with Taylor and third party EMS providers

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Datasheet
PQ1

Models	PQ1-3.7	PQ1-4.6	PQ1-5.0	PQ1-6.0	PQ1-7.0	PQ1-8.0	PQ1-10.0	PQ1-12.0
PV input								
Max. array power (W)	16000	16000	16000	20000	20000	24000	24000	24000
Max. input power (W)	15700	16000	16000	18000	19000	20000	22000	24000
Max. MPPT input power (per) (W)	8000							
Max. input voltage (V)	600 [1]							
Min. input voltage (V)	75							
Start-up input voltage (V)	80							
Nominal voltage (V)	360							
MPPT voltage range (V)	80 ~ 550							
MPPT voltage range (full load) (V)	96 ~ 550	120 ~ 550	130 ~ 550	105 ~ 550	121 ~ 550	105 ~ 550	130 ~ 550	155 ~ 550
Max. PV input current (A)	20 / 20	20 / 20	20 / 20	20 / 20 / 20	20 / 20 / 20	20 / 20 / 20 / 20	20 / 20 / 20 / 20	20 / 20 / 20 / 20
Max. isc PV current (A)	25 / 25	25 / 25	25 / 25	25 / 25 / 25	25 / 25 / 25	25 / 25 / 25 / 25	25 / 25 / 25 / 25	25 / 25 / 25 / 25
No. of MPP trackers	2	2	2	3	3	4	4	4
Strings per MPP tracker	1 + 1	1 + 1	1 + 1	1 + 1 + 1	1 + 1 + 1	1 + 1 + 1 + 1	1 + 1 + 1 + 1	1 + 1 + 1 + 1
Battery connection								
Battery type	Lithium-Ion battery (LFP)							
Battery voltage (V)	80 ~ 500							
Min. operating battery voltage (V)	80							
Min. battery voltage @ full AC load (V)	78	95	105	125	145	165	207	247
Max. battery charge power (W)	12000							
Max. battery discharge power (W)	3680	4600	5000	6000	7000	8000	10000	12000
Max. battery charge / discharge current (A)	50 / 50							
Depth of discharge (%)	90							
Scalability	yes							
AC output								
Rated output power (W)	3680	4600	5000	6000	7000	8000	10000	12000
Rated apparent power (VA)	3680	4600	5000	6000	7000	8000	10000 [2]	12000
Max. apparent power (VA)	3680	5060	5500	6600	7700	8800	11000 [2]	13200
Rated grid voltage (V)	220 / 230 / 240, L/N/PE							
Rated grid frequency (Hz)	50 / 60							
Rated output current (A)	16.7	20.9	22.7	27.3	31.8	36.4	45.5	54.5
Max. output current (A)	16.7	23.0	25.0	30.0	35.0	40.0	50.0	60.0
Power factor	1 (Adjustable from 0.8 leading to 0.8 lagging)							
THDI (%)	< 3 @ rated power							
AC input								
Max. apparent power (VA)	7000	7000	8800	11000	14500 [3]	14500 [3]	14500 [3]	14500 [3]
Rated grid voltage (V)	220 / 230 / 240, L/N/PE							
Rated grid frequency (Hz)	50 / 60							
Rated input current (A)	32.0	32.0	40.0	50.0	63.0 [3]	63.0 [3]	63.0 [3]	63.0 [3]
Power factor	1 (Adjustable from 0.8 leading to 0.8 lagging)							
Back-up output								
Max. apparent power (VA)	3680	4600	5000	6000	7000	8000	10000	12000
Load start capability (A)	122 @ 2s							
Rated output voltage (V)	220 / 230 / 240, L/N/PE							
Rated grid frequency (Hz)	50 / 60							
Rated output current for back-up load (bypass) (A)	32.0	32.0	40.0	50.0	63.0	63.0	63.0	63.0
Max. output current (A)	16.7	20.9	22.7	27.3	31.8	36.4	45.5	54.5
Power factor	1 (Adjustable from 0.8 leading to 0.8 lagging)							
Parallel operation	Yes @ Max. 3 pcs							
Switch time (ms)	< 4							
THDV (%)	< 3 @ linear load							
Efficiency								
Max. static MPPT efficiency (%)	99.90							
Max. conversion efficiency (%)	97.60	97.62	97.62	97.62	97.62	97.62	97.62	97.62
European efficiency (%)	97.16	97.20	97.20	97.20	97.20	97.20	97.20	97.20
Max. battery charge efficiency (PV to BAT) (@ full load) (%)	97.33							
Max. battery discharge efficiency (PV to BAT) (@ full load) (%)	96.40							

[1] Voltages exceeding 600 V may damage the inverter.
[2] Under Australian standards, the maximum apparent power is 9999 VA.
[3] This parameter can be set and adjusted via the App.

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Datasheet
PQ1

Models	PQ1-3.7	PQ1-4.6	PQ1-5.0	PQ1-6.0	PQ1-7.0	PQ1-8.0	PQ1-10.0	PQ1-12.0
Protection								
PV reverse polarity protection	Yes							
Anti-islanding protection	Yes							
Output short protection	Yes							
Leakage current protection	Yes							
Insulation resistor detection	Yes							
Overvoltage category	Yes							
Overcurrent protection / Overtemperature protection	Yes							
Earth fault	Yes							
DC / AC surge protection	Type II (PV) / Type II (AC)							
AFCI protection	Optional							
Battery warming function	Optional							
DC switch	Yes							
General data								
Dimensions (W x H x D) (mm)	570 x 420 x 380 (inverter)							
Dimensions of packaging (W x H x D) (mm)	654 x 538 x 464 (inverter)							
Net weight (kg)	35.0 (inverter)							
Gross weight (kg)	40.5 (inverter)							
Installation	Floor-mounted							
Operating temperature range (°C)	-25 ~ 55 (derating at 45)							
Storage temperature (°C)[6]	-10 ~ 55							
Storage / operation relative humidity (%)	0 ~ 95 (no condensation)							
Altitude (m)	< 3000							
Protection class	I							
Overvoltage category	III (AC), II (DC)							
Pollution degree	PD3 (PD2 inside)							
Ingress protection	IP66 (for outdoor use)							
Standby consumption (W)	< 15 (only PV and grid)							
Cooling	Natural	Natural	Natural	Natural	Fan cooling	Fan cooling	Fan cooling	Fan cooling
Noise emission (average) (dB)	< 35	< 35	< 35	< 35	< 50	< 50	< 50	< 50
Inverter topology	Non-isolated							
Communication interface	Ethernet, EMS (RS485), Meter, WiLAN (WiFi + LAN + Bluetooth), 4G (Optional), DRM, Ripple Control, USB, BMS (CAN), SG Ready							
Display	LED, LCD, app, website							
Export limit control	Yes							
Button	Capacitive touch sensor							
Standard								
Safety	EN/IEC 62109-1, EN/IEC 62109-2, EN/IEC62477-1, EN/IEC 62040(AU)							
EMC	EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, IEC 62920:2017							
RED	EN 50665:2017, ENIEC 62311:2020, EN 301 489-1 V2.2.3 (2019-11), EN 301 489-17 V3.2.4 (2020-09), EN 300 328 V2.2.2(2019-07), EN 55032:2015+A11:2020+A1:2020, EN 55035:2017+A11:2020							
Grid regulation	AS/NZS 4777.2:2020							
Battery regulation	IEC62619:2022							
Warranty								
Product Warranty	10 years (backed by Fox ESS)							

Datasheet
TQ5000

Models	TQ5000-S (w)_2S	TQ5000-S (w)_3S	TQ5000-S (w)_4S	TQ5000-S (w)_5S	TQ5000-S (w)_6S
Electrical characteristics					
Battery type	LFP ($LiFePO_4$)				
Battery module	1 x EQ5000-M 1 x EQ5000-S	1 x EQ5000-M 2 x EQ5000-S	1 x EQ5000-M 3 x EQ5000-S	1 x EQ5000-M 4 x EQ5000-S	1 x EQ5000-M 5 x EQ5000-S
Nominal capacity (kWh)	9.84	14.76	19.68	24.60	29.52
Nominal voltage (V)	128.0	192.0	256.0	320.0	384.0
Operating voltage (V)	116.0 ~ 146.0	174.0 ~ 219.0	232.0 ~ 292.0	290.0 ~ 365.0	348.0 ~ 438.0
Recommend discharge current (A)	38.5				
Max. charge / discharge current (A) [4]	50				
Peak discharge current (A)	65 @ 60 sec				
Battery pack round-trip efficiency (%) [5]	> 95				
Depth of discharge (%)	90				
Communication	CAN				
Display	LED x 1				
Scalability	Max. 6 modules in series				
Operating conditions					
Installation location	Outdoor/ indoor				
Operating temperature (°C) [6]	Charge: 0 ~ 55 | discharge: -10 ~ 55				
Operating temperature (°C) (warm-up function on, optional)	Charge: -25 ~ 55 | discharge: -25 ~ 55				
Storage temperature (°C)	-10 ~ 50				
Cooling method	Natural convection				
Humidity (%)	5 ~ 95 (no condensing)				
Altitude (m)	Max. 3000				
Protection					
Fire protection function	Yes				
Mechanical characteristics					
Dimensions (W x H x D) (mm)	570 x 270 x 380	570 x 405 x 380	570 x 540 x 380	570 x 675 x 380	570 x 810 x 380
Weight (kg)	82	123	164	205	246
Cell net weight (kg)	56.3	84.5	112.6	140.8	168.9
Certificates					
Safety	IEC 62619				
EMC	EN IEC 61000-6-1/2/3/4				
Transportation	UN38.3				
Ingress protection	IP65				
Warranty					
Product Warranty	10 years (backed by Fox ESS)				

[4] The current is affected by temperature, cell voltage and SOC.
[5] 25°C, 0.3C charging/discharging.
[6] Charge and discharge power reduction applies at low temperatures.

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