

# taylor.



PRODUCED BY



## all-in-one energy storage system

### PQ3

Three-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

[taylor.solar](https://taylor.solar)

| Models                                                          | PQ3-5.0-M                                                                                                                            | PQ3-6.0-M | PQ3-8.0-M | PQ3-10.0-L-M | PQ3-10.0-M | PQ3-12.0-M | PQ3-15.0-M |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|--------------|------------|------------|------------|
| PV input                                                        |                                                                                                                                      |           |           |              |            |            |            |
| Max. array power (W)                                            | 11000                                                                                                                                | 14000     | 18000     | 20000        | 20000      | 24000      | 30000      |
| Max. input power (W)                                            | 11000                                                                                                                                | 13200     | 17600     | 20000        | 20000      | 24000      | 30000      |
| Max. input voltage (V)                                          | 1000 <sup>1</sup>                                                                                                                    |           |           |              |            |            |            |
| Nominal operating voltage (V)                                   | 620                                                                                                                                  |           |           |              |            |            |            |
| Max. MPPT input current (A)                                     | 20 / 20 / 20                                                                                                                         |           |           |              |            |            |            |
| Max. MPPT short-circuit current (A)                             | 25 / 25 / 25                                                                                                                         |           |           |              |            |            |            |
| Max. MPPT input power (W)                                       | 10000 / 10000 / 10000                                                                                                                |           |           |              |            |            |            |
| Min. operating input voltage (V)                                | 90 <sup>2</sup>                                                                                                                      |           |           |              |            |            |            |
| MPPT voltage range (V)                                          | 120 ~ 950                                                                                                                            |           |           |              |            |            |            |
| Start-up input voltage (V)                                      | 140                                                                                                                                  |           |           |              |            |            |            |
| MPPT voltage range (full load) (V)                              | 120 ~ 850                                                                                                                            | 120 ~ 850 | 140 ~ 850 | 175 ~ 850    | 175 ~ 850  | 210 ~ 850  | 263 ~ 850  |
| No. of MPP trackers                                             | 3                                                                                                                                    |           |           |              |            |            |            |
| Strings per MPP tracker                                         | 1 + 1 + 1                                                                                                                            |           |           |              |            |            |            |
| Max. inverter backfeed current to the array                     | 0                                                                                                                                    |           |           |              |            |            |            |
| Battery connection                                              |                                                                                                                                      |           |           |              |            |            |            |
| Battery type                                                    | Lithium-Ion battery (LFP)                                                                                                            |           |           |              |            |            |            |
| Battery voltage (V)                                             | 80 ~ 500                                                                                                                             |           |           |              |            |            |            |
| Min. operating battery voltage (V)                              | 85                                                                                                                                   |           |           |              |            |            |            |
| Min. battery voltage @ full AC load (V)                         | 108                                                                                                                                  | 125       | 160       | 210          | 210        | 250        | 310        |
| Max. battery charge power (W)                                   | 6000                                                                                                                                 | 7200      | 9600      | 12000        | 12000      | 14000      | 15000      |
| Max. battery discharge power (W)                                | 5000                                                                                                                                 | 6000      | 8000      | 10000        | 10000      | 12000      | 15000      |
| Max. battery charge / discharge current (A)                     | 50                                                                                                                                   |           |           |              |            |            |            |
| Communication interface                                         | CAN                                                                                                                                  |           |           |              |            |            |            |
| AC output                                                       |                                                                                                                                      |           |           |              |            |            |            |
| Nominal output power (W)                                        | 5000                                                                                                                                 | 6000      | 8000      | 9999         | 10000      | 12000      | 15000      |
| Max. apparent output power (VA)                                 | 5500                                                                                                                                 | 6600      | 8800      | 9999         | 11000      | 13200      | 16500      |
| Rated grid voltage (AC voltage range) (V)                       | 400 / 230; 380 / 220, 3L/N/PE                                                                                                        |           |           |              |            |            |            |
| Rated grid frequency (Hz)                                       | 50 / 60, ±5                                                                                                                          |           |           |              |            |            |            |
| Rated output current (per phase) (A)                            | 7.6                                                                                                                                  | 9.1       | 12.1      | 15.2         | 15.2       | 18.2       | 22.7       |
| Max. output current (per phase) (A)                             | 8.3                                                                                                                                  | 10.0      | 13.3      | 15.2         | 16.7       | 20.0       | 25.0       |
| Power factor                                                    | 1 (Adjustable from 0.8 leading to 0.8 lagging)                                                                                       |           |           |              |            |            |            |
| THDI (%)                                                        | < 3 @ rated power                                                                                                                    |           |           |              |            |            |            |
| AC input                                                        |                                                                                                                                      |           |           |              |            |            |            |
| Max. input power (VA)                                           | 43470                                                                                                                                |           |           |              |            |            |            |
| Rated grid voltage (V)                                          | 400 / 230; 380 / 220, 3L/N/PE                                                                                                        |           |           |              |            |            |            |
| Rated grid frequency (Hz)                                       | 50 / 60, ±5                                                                                                                          |           |           |              |            |            |            |
| Rated input current (per phase) (A)                             | 63                                                                                                                                   |           |           |              |            |            |            |
| EPS output (on grid mode)                                       |                                                                                                                                      |           |           |              |            |            |            |
| Max. output power for backup load (per phase) (W)               | 43470                                                                                                                                |           |           |              |            |            |            |
| Max. output current for backup load (A)                         | 3 x 63                                                                                                                               |           |           |              |            |            |            |
| EPS output (off grid mode)                                      |                                                                                                                                      |           |           |              |            |            |            |
| Max. apparent output power (VA)                                 | 5000                                                                                                                                 | 6000      | 8000      | 10000        | 10000      | 12000      | 15000      |
| Peak apparent output power (60s) (VA)                           | 6000                                                                                                                                 | 7200      | 9600      | 12000        | 12000      | 14400      | 15000      |
| Rated output voltage (V)                                        | 400 / 230, 3L/N/PE                                                                                                                   |           |           |              |            |            |            |
| Rated grid frequency (Hz)                                       | 50 / 60                                                                                                                              |           |           |              |            |            |            |
| Max. continuous current (per phase) (A)                         | 7.2                                                                                                                                  | 8.7       | 11.6      | 14.5         | 14.5       | 17.4       | 21.7       |
| Max. unbalanced load power (per phase) (kW)                     | 1.6                                                                                                                                  | 2.0       | 2.6       | 3.3          | 3.3        | 4.0        | 5.0        |
| Step-down start                                                 | Yes                                                                                                                                  |           |           |              |            |            |            |
| EPS overload automatic recovery time                            | Try 3 times (15s) everytime will alarm a fault, after 3 failures, stop the recovery logic, clients need to clear the fault manually. |           |           |              |            |            |            |
| Power factor                                                    | 1 (Adjustable from 0.8 leading to 0.8 lagging)                                                                                       |           |           |              |            |            |            |
| Parallel operation                                              | Yes @ max. 10 pcs                                                                                                                    |           |           |              |            |            |            |
| Switch time (single device) (ms)                                | < 20                                                                                                                                 |           |           |              |            |            |            |
| THDV (%)                                                        | < 3 @ rated power                                                                                                                    |           |           |              |            |            |            |
| Efficiency                                                      |                                                                                                                                      |           |           |              |            |            |            |
| Max. static MPPT efficiency (%)                                 | 99.90                                                                                                                                |           |           |              |            |            |            |
| Max. conversion efficiency (%)                                  | 97.80                                                                                                                                | 97.80     | 97.90     | 97.90        | 97.90      | 97.90      | 97.90      |
| European efficiency (%)                                         | 97.00                                                                                                                                | 97.00     | 97.10     | 97.30        | 97.30      | 97.50      | 97.50      |
| Max. battery charge efficiency (PV to BAT) (@ full load) (%)    | 97.00                                                                                                                                | 97.10     | 97.20     | 97.40        | 97.40      | 97.50      | 97.60      |
| Max. battery discharge efficiency (PV to BAT) (@ full load) (%) | 97.00                                                                                                                                | 97.10     | 97.20     | 97.20        | 97.20      | 97.20      | 97.20      |

<sup>1</sup> For 1000V system, PV maximum operating voltage is 950V. <sup>2</sup> The starting working voltage of the power supply is 90V.

V1.2 | All data and specifications are preliminary and subject to change without notice.

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| Models                                              | PQ3-5.0-M                                                                                                             |         | PQ3-6.0-M | PQ3-8.0-M | PQ3-10.0-L-M                     | PQ3-10.0-M | PQ3-12.0-M  | PQ3-15.0-M  |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------|-----------|-----------|----------------------------------|------------|-------------|-------------|
| Protection                                          |                                                                                                                       |         |           |           |                                  |            |             |             |
| PV reverse polarity protection                      |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Battery reverse protection                          |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Anti-islanding protection                           |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Output short protection                             |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Leakage current protection                          |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Insulation resistor detection                       |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Overvoltage category                                |                                                                                                                       |         |           |           | III (AC side), II (DC side)      |            |             |             |
| Reverse connect protection                          |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Overcurrent protection / Overtemperature protection |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| DC / AC surge protection                            |                                                                                                                       |         |           |           | Type II (PV) / Type II (AC)      |            |             |             |
| AFCI protection                                     |                                                                                                                       |         |           |           | 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)            |                                                                                                                       |         |           |           | 760 x 545 x 595 (inverter)       |            |             |             |
| Net weight (kg)                                     |                                                                                                                       |         |           |           | 42.6 (inverter)                  |            |             |             |
| Gross weight (kg)                                   |                                                                                                                       |         |           |           | 64.5 (inverter)                  |            |             |             |
| Installation                                        |                                                                                                                       |         |           |           | Floor-mounted                    |            |             |             |
| Operating temperature range (°C)                    |                                                                                                                       |         |           |           | -25 ~ 60 (derating at 45)        |            |             |             |
| Storage temperature (°C)                            |                                                                                                                       |         |           |           | -40 ~ 75                         |            |             |             |
| Storage / operation relative humidity (%)           |                                                                                                                       |         |           |           | 0 ~ 100 (no condensation)        |            |             |             |
| Altitude (m)                                        |                                                                                                                       |         |           |           | < 4000 @ derating exceeding 3000 |            |             |             |
| Protection class                                    |                                                                                                                       |         |           |           | I                                |            |             |             |
| Ingress protection                                  |                                                                                                                       |         |           |           | IP66 (for outdoor use)           |            |             |             |
| Standby consumption (W)                             |                                                                                                                       |         |           |           | < 15 (only PV and battery)       |            |             |             |
| Idle mode                                           |                                                                                                                       |         |           |           | Yes                              |            |             |             |
| Cooling                                             | Natural                                                                                                               | Natural | Natural   | Natural   | Natural                          | Natural    | Fan cooling | Fan cooling |
| Noise level (dB)                                    | < 40                                                                                                                  | < 40    | < 40      | < 40      | < 40                             | < 40       | < 55        | < 55        |
| Inverter topology                                   |                                                                                                                       |         |           |           | Non-isolated                     |            |             |             |
| Monitoring module (integrated)                      |                                                                                                                       |         |           |           | WiFi, LAN, 4G                    |            |             |             |
| Communication interface                             | Meter, WIFI / 4G (Optional), Bluetooth, DRM, Ethernet, USB, BMS (CAN), RS485, Ripple Control, SG Ready, Dry Contact*2 |         |           |           |                                  |            |             |             |
| Display                                             |                                                                                                                       |         |           |           | LED, LCD, app, website           |            |             |             |
| Button                                              |                                                                                                                       |         |           |           | Capacitive touch sensor          |            |             |             |
| Buzzer                                              |                                                                                                                       |         |           |           | 1, inside (EPS & earth fault)    |            |             |             |
| Standard                                            |                                                                                                                       |         |           |           |                                  |            |             |             |
| Safety                                              | EN/IEC62109-1, EN/IEC62109-2                                                                                          |         |           |           |                                  |            |             |             |
| EMC                                                 | IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3, IEC61000-4-2/3/4/5/6/8                                                   |         |           |           |                                  |            |             |             |
| RED                                                 | AS4777.2-2020, VDE-AR-N 4105, VDE0126-1-1, G98, EN50549-1, CEI 0-21, IEC62116, IEC61727, IEC61683                     |         |           |           |                                  |            |             |             |
| Warranty                                            |                                                                                                                       |         |           |           |                                  |            |             |             |
| Product Warranty                                    | 10 years (backed by Fox ESS)                                                                                          |         |           |           |                                  |            |             |             |



| 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 <sub>4</sub> )             |                              |                              |                              |                              |
| Battery module                                                 | 1 x EQ5000-M<br>1 x EQ5000-S           | 1 x EQ5000-M<br>2 x EQ5000-S | 1 x EQ5000-M<br>3 x EQ5000-S | 1 x EQ5000-M<br>4 x EQ5000-S | 1 x EQ5000-M<br>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) <sup>3</sup>               | 50                                     |                              |                              |                              |                              |
| Peak discharge current (A)                                     | 65 @ 60 sec                            |                              |                              |                              |                              |
| Battery pack round-trip efficiency (%) <sup>4</sup>            | > 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) (warm-up function off) <sup>5</sup> | Charge: 0 ~ 55   discharge: -10 ~ 55   |                              |                              |                              |                              |
| Operating temperature (°C) (warm-up function on)               | 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)           |                              |                              |                              |                              |

<sup>3</sup> The current is affected by temperature, cell voltage and SOC.  
<sup>4</sup> 25°C, 0.3C charging/discharging.  
<sup>5</sup> Charge and discharge power reduction applies at low temperatures.