



The Power Behind Competitiveness

Delta RPI-M20A

Grid-Tied Solar Inverter
RPI-M20A



Product Features

- Transformerless Inverter
- Dual MPP Trackers
- Peak Efficiency up to 98.4%
- Wide Voltage Range (200 ~ 1000Vdc)
- Reactive Power Control
- Ergonomic Grip Design
- Ultra Compact Size
- Built-in Energy-logger
- IP65 Protection Level
- Built-in DC Switch

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DELTA
Smarter. Greener. Together.

Delta RPI-M20A

With Delta's cutting-edge technology, the commercial series Solar Inverters are with efficiencies as high as 98.4%. These inverters are compact in size with durable quality to ensure smooth PV system operation. IP65 enclosure provides higher level of protection and enhances its durability in a harsh outdoor environment.



Delta RPI-Commercial Series

Technical data RPI-M20A

| INPUT (DC) | RPI-M20A |
|---------------------------------|---------------|
| Max. DC Power | 25 kWp |
| Max. Input Voltage | 1000 V |
| DC Voltage Range | 200 - 1000 V |
| Start-up Voltage | > 250 V |
| MPPT Voltage Range | 200 - 1000 V |
| MPP voltage range, Full Power | 470 - 820 V |
| Nominal DC Voltage | 635 V |
| Max. Input Current per MPPT | 22 A |
| Total Input Current | 44 A |
| No. of Independent MPP Trackers | 2 |
| Unbalanced Input (%) | 33 / 67 |
| Input Connection Type | 4 pair MC4 |
| DC Disconnection Switch | Yes (Inbuilt) |

| OUTPUT (AC) | |
|-----------------------------------|----------------------------|
| Rated Output Power | 20 kVA |
| Maximum output power | 21 kVA |
| Rated output current | 29 A |
| Max. Output Current | 32 A |
| Nominal AC Voltage | 3 Ph, 400 V |
| AC Voltage Range | 400 V \pm 20 % (320~480) |
| Nominal Frequency | 50 Hz |
| Frequency Range | 45 Hz - 55 Hz |
| Power Factor at Rated Power | Unity |
| Reactive Power (Adjustable) | 0.8 Lagging ~ 0.8 Leading |
| Harmonics | <3% at Rated Power |
| No. of Conductors (user settable) | 4/5 Wire (L1,L2,L3,N,PE) |

| EFFICIENCY | |
|--------------------|--------|
| Maximum Efficiency | 98.40% |
| Euro Efficiency | 98.10% |

| PROTECTION | |
|---|----------|
| Input-side Disconnection Device | Yes |
| Ground Fault Monitoring / Grid Monitoring | Yes |
| DC Reverse Polarity Protection | Yes |
| DC Over Voltage / Current Limitation Protection | Yes |
| AC Short Circuit Protection | Yes |
| AC Over Voltage / Current Limitation Protection | Yes |
| DC / AC Side Surge Protection - Inbuilt | Yes, MOV |

| GENERAL DATA | RPI-M20A |
|-----------------------------|---|
| Dimension (H/W/D) | 625 x 612 x 278 mm |
| Weight (kg) | 43 |
| Operating Temperature Range | - 25 °C to + 60 °C (Full Power - 20 °C to + 40 °C) |
| Relative Humidity | 0~100%, Non-condensing |
| Operating Elevation | < 2000 m |
| Degree of Protection | IP65 |
| Noise Level (Typical) | <55 dB (1m Front Panel) |
| Self Consumption at Night | < 2 Watts |

| SAFETY/STANDARDS | |
|---|---|
| Anti-islanding Protection / Grid Regulation | DIN VDE V 0124-100; DIN VDE V 0126-1-1; VDE 4105; IEC 61727; IEC 62116 |
| EMC | EN 61000; IEC 61000 |
| Safety | IEC/EN 62109 |
| Efficiency | IEC 61683:1999 |
| Environmental Testing | IEC 60068-2 (1,2,14,30) & (6,21,27,75,78) (As Per MNRE and SECI Requirement) |
| Ingress Protection | EN 60529:1991+A1:2000; IEC 60529:1989/A1:1999 |

| COMMUNICATION | |
|-----------------------------|---------------------------------------|
| Communication Interface | MODBUS RTU over RS 485 Physical Layer |
| Graphical Display | 5" Graphical LCD |
| Built-in Energy Data Logger | Yes |
| Emergency Power Off (EPO) | Yes, External Switch to be Connected |

| WARRANTY | |
|-------------------|---------|
| Standard Warranty | 5 Years |

Note

1. If PV Module is Grounded (Negative / Positive Grounding), Separate Isolation Transformer is Required at the Grid Interface of Inverter.
2. Parallel Operation of Inverters is Possible For Large Power Plants.
3. Installing SPD's For PV and AC Circuit is Recommended.
4. Please Refer to our Standard Warranty Terms and Conditions For Details.

For Any Sales / Application Engineering Support, Please Contact :

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