



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

[www.deltaelectronicsindia.com](http://www.deltaelectronicsindia.com)



**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
Recommended Max. DC Power	25 kWp
Max. Input Voltage	1000 V
DC Voltage Range	200 - 1000 V
Start-up Voltage	>250 V
Start-up Power	40W
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
Maximum Short Circuit Current	24A / 24A
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
Inrush Current	150A / 100 $\mu$ s
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
DC Injection	<0.5% at Rated Output Current
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; EN 50530 (As Per MNRE and SECI Requirement)
Environmental Testing	IEC 60068-2 (1,2,14,30) & (6,21,27,75,78)
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

### Notes

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 SPDs for PV and AC circuit is recommended
4. Refer to Delta's Standard Warranty Terms and Conditions for more details

**For Any Sales / Application Engineering Support, Please Contact :**

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