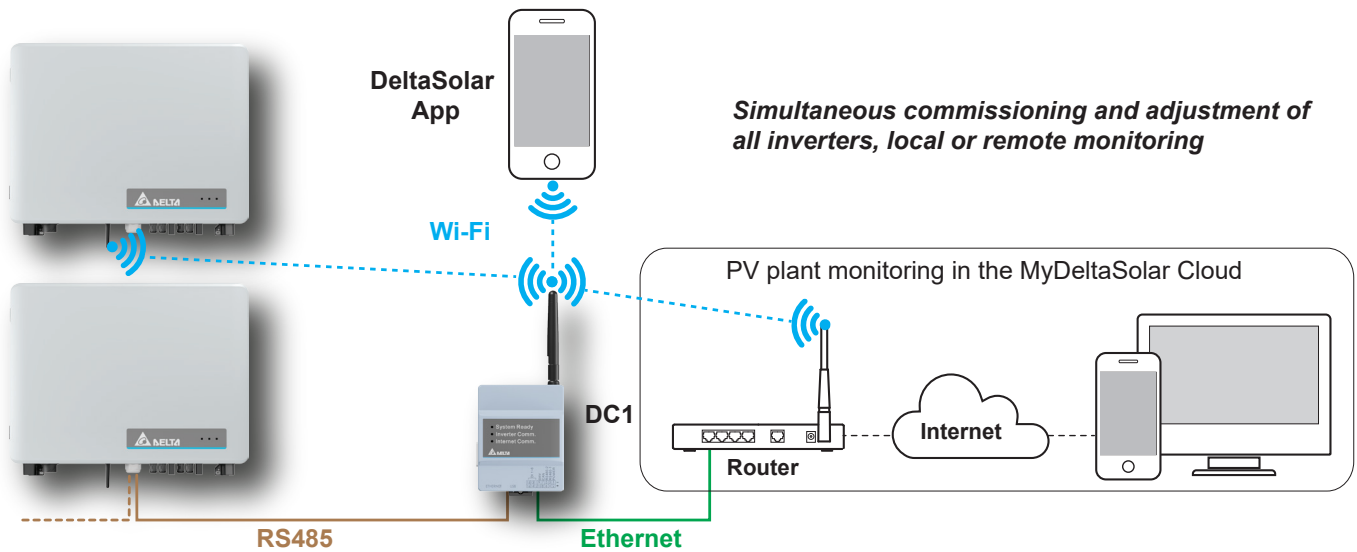




System monitoring with the DC1 data collector

- The DC1 data collector extends the functions for monitoring, controlling or adjusting Delta solar inverters.
- With an optional power meter, you also gain full control over self-consumption, energy consumption and feed-in power.
- The power meters also enable dynamic power control in residential, commercial and industrial PV systems.

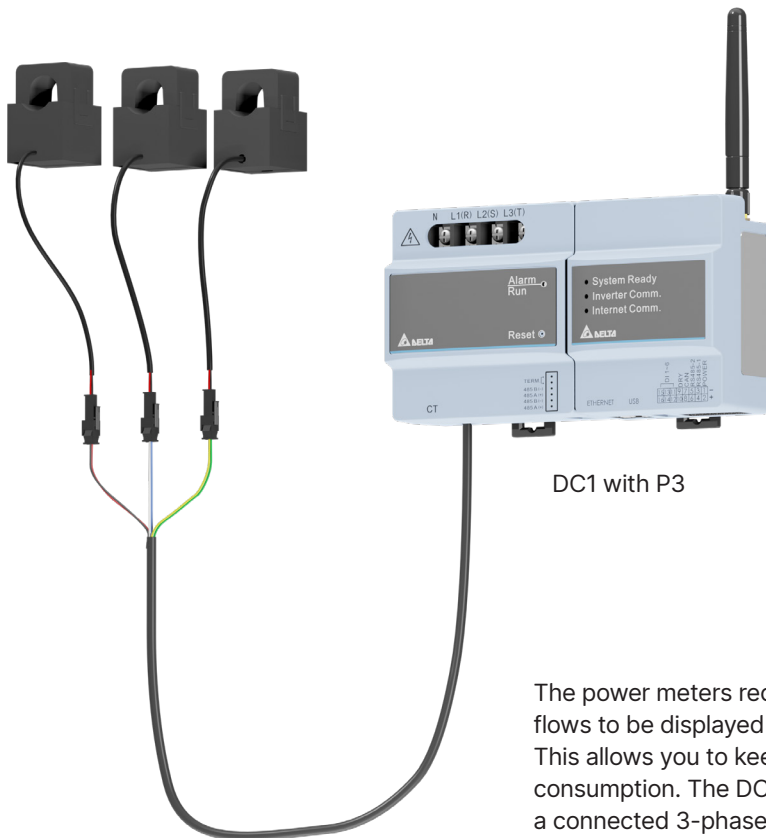
DC1 Data Collector



The DC1 data collector is the central communication interface in a solar PV plant with Delta inverters.

All inverters can be accessed via the DC1 using the DeltaSolar app or Delta Service Software.

Extension modules

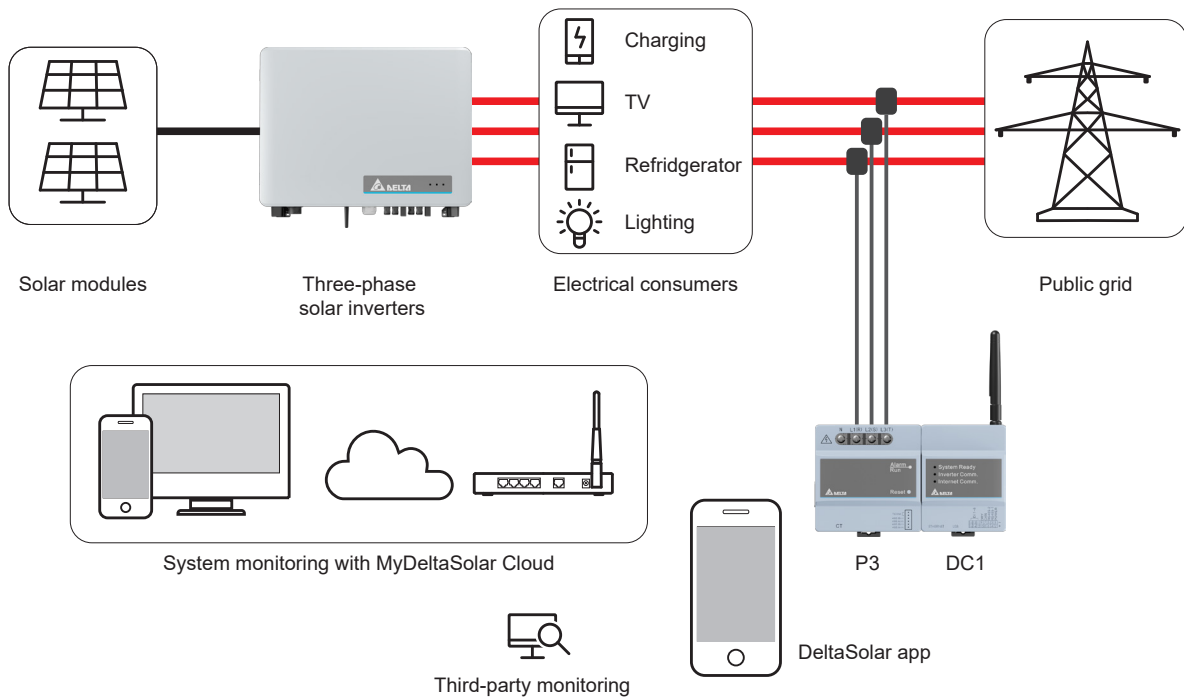


Delta offers the P3E/P3 power meters as expansion modules for three-phase grids. P3E/P3 are supplied with three current clamps to record the current flow in all three phases. P3E is for max. 120 A_{AC}, P3 for max. 300 A_{AC}.



The power meters record the phase current and thus enable energy flows to be displayed in the DeltaSolar app or the MyDeltaSolar Cloud. This allows you to keep track of feed-in, energy consumption and self-consumption. The DC1 is supplied with power via the power meter, from a connected 3-phase inverter (RS485) or a separate micro-USB power adapter.

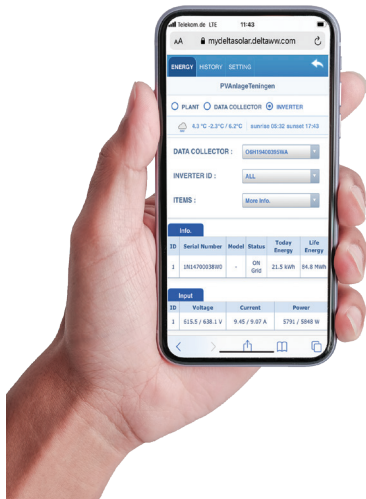
System Overview



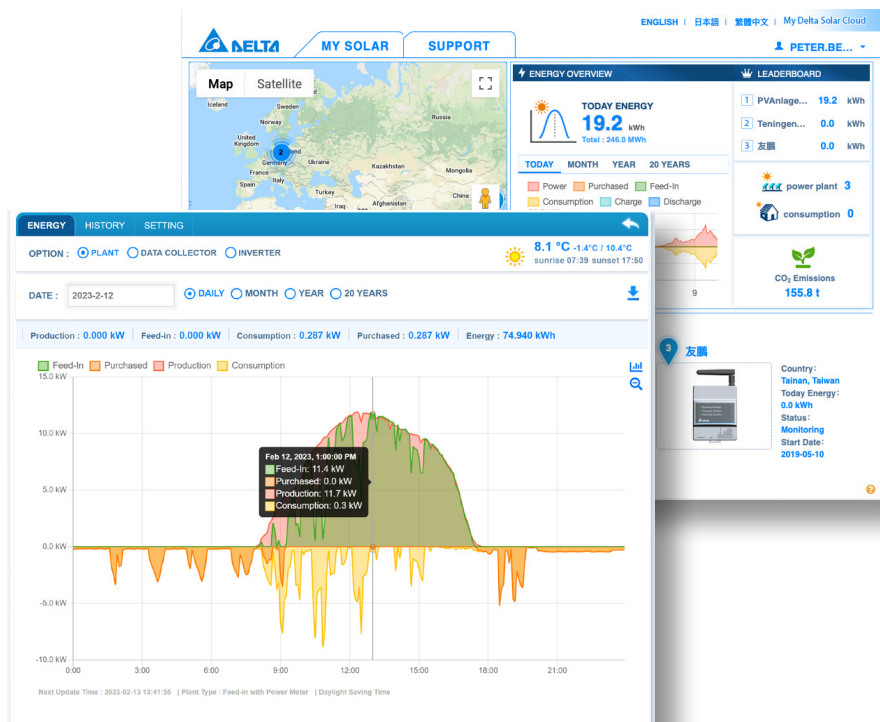
System overview for three-phase systems with DC1 data collector and P3 power meter

DeltaSolar App and MyDeltaSolar Cloud

With the DeltaSolar app for iOS and Android, you can connect directly to an individual inverter or to all of them simultaneously via the DC1.



The energy flows are clearly displayed graphically - for all inverters together or individually.



Technical Data

	DC1 Data Collector
Electrical and mechanical data	
Supply voltage	Alternative: Power supply via P1/P3.
via RS485 connector	9to25V _{DC} /5W
via micro USB	5 V _{DC} / 5 W
Connections	Wi-Fi, Ethernet, 2x RS485, Micro-USB, USB A
Max. Number of controllable inverters	RS485: 32; Wi-Fi: 9; mixed RS485 + Wi-Fi: 32
Operating temperature range	-25 to +60 °C
Degree of protection	IP20
Dimensions (W x H x D) with / without antenna	72 x 106 x 55 mm / 72 x 186 x 55 mm
Wi-Fi	
Network standards	IEEE 802.11b / 802.11g / 802.11n
Data rates	IEEE 802.11b: 1 to 11 Mbps / IEEE 802.11g: 6 to 54 Mbps / IEEE 802.11n: 6.5 to 150 Mbps
Modulation	OFDM (BPSK), QPSK, 16-QAM, 64-QAM; 802.11b (CCK / DSSS)
Bandwidth	20 MHz / 40 MHz
EMC and safety	EN 300 328, LP0002, Part 15C, Telec T66; EN 61010-1, CE compliance
Immunity (EMS)	EN 301 489-1/-17, EN 55024, EN 55032, FCC Part 15B

	P1 Power Meter	P3E Power Meter	P3 Power Meter
Delta part number	PPM P1_120	PPM P3E-000	PPM P3_120
Number of phases	1	3	3
Input voltage range	85 to 264 V _{AC}	180 to 264 V _{AC}	95 to 277 V _{AC}
Nominal voltage	L-N: 230 V _{AC} ; L-L: 400 V _{AC}		
Frequency range	50 ± 5 Hz / 60 ± 5 Hz		
Max. power of installed inverters	31.6 kVA at 264 V _{AC}	95 kVA at 264 V _{AC}	249 kVA at 277 V _{AC}
Self-consumption	2 W	3 W	3 W
Current transformer	120 A	120 A	300 A
Max. cable diameter of the current transformer	15 mm	15 mm	23 mm
Operating temperature range	-20 to +60 °C	-20 to +50 °C	-20 to +60 °C
Degree of protection	IP20		
Dimensions power meter (W x H x D)	72 x 90 x 55 mm	70 x 93 x 66.5 mm	90 x 90 x 55 mm
Dimensions current transformer (W x H x D)	27 x 30 x 45 mm	27 x 30 x 45 mm	46,5 x 68 x 35,5 mm
Communication interfaces	RS485		
EMC and safety	EN61010-1, EN61326, CE Conformity		
Measurement accuracy	Class I		

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