



FPG3-DM

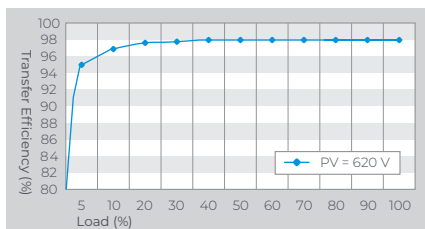
3-PHASE, DOUBLE MPPT
GRID-TIED PV INVERTER

EFFICIENCY 98%

10 ~ 20 KW OUTPUT

IP65 PROTECTION

OVERVIEW



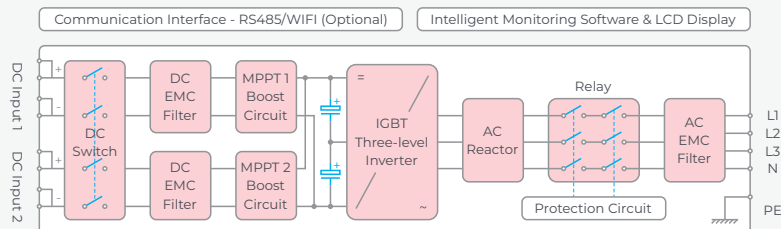
CHOOSING FREDTON

Specialized vendor with ability to supply all the elements like PV module, inverter, mounting system, and also UPS system.

Reliable partner of distributors, installers and system integrators with local warehousing, delivery service and after sales support.

Manufacturing with international quality management standards and environment management system ISO 9001 and ISO 14001.

Circuit Diagram



KEY FEATURES



Economical & Flexible

Maximum efficiency 98%; Maximum PV voltage up to 500V; Parallelable via RS485 port; GPRS/WIFI communication as optional.



Safe & Reliable

Harshest IP65 industrial protection; Natural cooling; Multi-level device protection; Anti-corrosion with aluminum alloy die casting.



Easy to Use

Smaller & lighter, simplified wall-mounting; Easy local & on-line monitoring operational status and electricity generated data.

CERTIFICATIONS



ELECTRICAL CHARACTERISTICS

Input (DC)

Part Number		FPG3-DM-10K	FPG3-DM-12K	FPG3-DM-15K	FPG3-DM-17K	FPG-DM-20K
Maximum DC Power	(KW)	11.5	13.5	16.5	18.5	22.5
Maximum DC Voltage	(VDC)	1000				
Norminal DC Voltage	(VDC)	620				
MPPT Voltage Range	(VDC)	250 ~ 950				
Full Load MPPT Voltage Range	(VDC)	480 ~ 800				
Minimum Start DC Voltage	(VDC)	200 250				
Number of MPPT Trackers		2				
Strings per MPPT Tracker		1	1	2	2	2
Maximum Current per MPPT Tracker	(A)	13/13	13/13	21/21	21/21	21/21

Output (AC)

Norminal AC Power	(KW)	10	12	15	17	20
Maximum AC Power	(KW)	11	13	16	18	22
Norminal AC Voltage Range	(VAC)	400 ± 20%				
Norminal AC Grid Frequency Range	(Hz)	50/60 ± 5				
Maximum Output Current	(A)	17	20	24	27	32
Power Factor (Cos φ)		0.9 Leading ~ 0.9 Lagging				
THDI		< 3%				
AC Connection		3W+N+PE				
Topology		Transformer-less				

Efficiency

Maximum Efficiency		98%				
European Efficiency		97.5%				
MPPT Efficiency		99.9%				

PHYSICAL CHARACTERISTICS

Part Number		FPG3-DM-10K	FPG3-DM-12K	FPG3-DM-15K	FPG3-DM-17K	FPG-DM-20K
Dimensions (W x L x D)	(mm)	553 x 715 x 228				
Weight	(Kg)	35	35	39	39	39

PROTECTIONS

AC Leakage Current Fault	■	DC Surge	■
Ground Fault	■	AC Surge	■
Anti-islanding	■	DC Reverse Polarity	■
DC Over-voltage	■	Enclosure Protection Rating	IP65

ENVIRONMENT

Operating Temperature Range	(°C)	-25 ~ +60
Noise Emission (Typical)	(dB)	≤ 40
Cooling Type		Natural

FEATURES

LCD Display	■
DC Switch; RS485 Interface	■
WIFI/GPRS (Overriding RS485)	□

CERTIFICATIONS

Quality Assurance	ISO 9001 & ISO 14001 Certified
Certificates & Approvals Available upon Request	IEC 62109, IEC 61000, IEC 61727, IEC 61683, IEC 62116 CE, VDE 0126, VDE 4105, PEA/MEA