

# Multifunction Harmonic **Power Factor Controller**



- **Accurate measurement of capacitor.**
- **No need of engineers to measure capacitors personally.**
- **Combines two functions of power quality meter & power factor adjustment.**

# Multifunction Power Factor Controller

## Harmonic

### Functions

- Auto/Manual operating mode
- Measured parameters in A, V, VA, Watt, Var, PF, Hz, °C, THD-V, THD-I
- Direct reading in each parameter represented by a clear symbol illuminated on LCD screen
- Independent alarm to be energized the FAN for the temp. cooling around the inner cabinet
- Bargraphic indication for A, V and Temp.
- Versatile switching modes for configuring an optimized PF target
- Auto-reversal correction in a wrong phase sequence
- Initially memorized parameters for the switched-on capacitors
- Actual operating memorized parameters for the switched-on capacitors
- Running-hour time of the switched-on capacitor
- Recording for a number of times of the switched-on capacitor
- Indication of the abnormal status events
- Built-in input temperature sensor
- THD-I/THD-V components in % set-up for switching off the capacitor
- Alarm set-up for the measured under/over-current/voltage in %
- Adjustable delay time set-up for switching-on/off the capacitor

### Specification overview

Type	YPD-6	YPD-12	YPM-7	YPM-14
Outputs	3~6 steps	3~12 steps	3~7 steps	3~14 steps
Controlling mode	Auto / Manual			
Switching mode	Circular / Stack		Circular / Stack / Auto	
C/K setting	Auto / Manual			
Delay time setting (sec)	1~999 sec			
PF target range	0.7(Cap) ~ -0.7(Ind)			
PF target mode	Cap. load or only Ind. load			
Input voltage	AC 220/380V	AC 220/380V	AC 90~550V	AC 90~550V
Power consumption	≤4VA	≤6VA	≤6VA	≤8VA
Weight	0.55Kg	0.6Kg	0.5Kg	0.55Kg
Frequency range	45~65Hz			
IP Code	Front Panel IP 52 (IEC 60529)			
Auto-reversal correction in wrong phase sequence	●	●	●	●
Amp THD measurement (THD-I)	●	●	●	●
Volt THD measurement (THD-V)			●	●
Switching on one step of the capacitor for fixed compensation under light load conditions	●	●	●	●
Inner setup for 1P or 3P system wiring			●	●
Display of V.A.W.Var.VA.Hz RS 485 interface			●	●
High components set in THD% for the alarm energized			●	●
Individual order harmonic distortion measurement			●	●
Capacitance decrease(%) set for the alarm energized			●	●
Temp. range set for the alarm energized			●	●
Volt/Amp chane indication in %			●	●
Alarm set-up for the measured under / over-current / voltage	●	●	●	●
Alarm set-up for the measured under / low-current / voltage	●	●	●	●
Recording for a action of switching-on/off the capacitor			●	●
Password setting protection			●	●

### Communication

Interface.....RS 485  
 Protocol .....MODBUS, RTU  
 Baud rate .....1200 ~ 38400 programmable  
 Address .....1 ~ 255 programmable  
 Data format .....N.8.1, N.8.2, O.8.1, E.8.1  
 Parallel connection .....Up to 32 meters

### Characteristics

Input current..... AC 0.05 ~ 5A  
 Display screen: LCD white backlight, 3 inch

#### Display format:

PF.....3 digit  
 A, V, VA, Watt, Var, Hz, °C.....4 digit  
 THD-I, THD-V, .....3 digit  
 Individual HD-I, HD-V.....3 digit

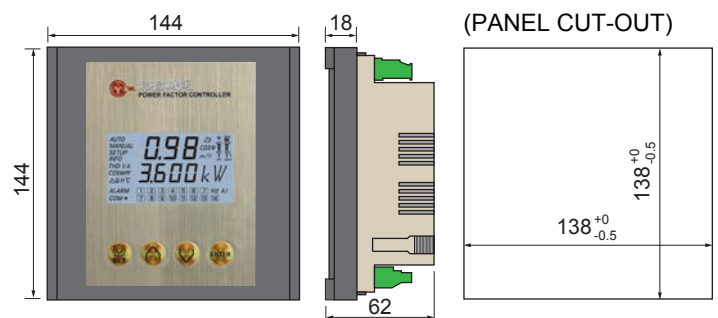
#### Accuracy:

V, A..... ±0.2% F.S.  
 VA, Watt, Var..... ±0.5% F.S.  
 PF..... ±0.02  
 Over voltage range set-up..... 110 ~ 130%; 120% as default value  
 Operating temperature..... 0 ~ 60°C  
 Storage temperature..... -10 ~ 70°C  
 Total harmonic distortion..... Up to 31st  
 Harmonic analysis (THD& IHD)..... V, A  
 Dielectric strength..... IEC 60688, AC 2KV, 60Hz, 1 min.  
 between input/output/power

### Electromagnetic compatibility (EMC)

Electrostatic discharge.....IEC 61000-4-2  
 Electromagnetic field immunity.....IEC 61000-4-3  
 Electrical fast transient/burst immunity.....IEC 61000-4-4  
 Surge immunity.....IEC 61000-4-5  
 Immunity to conducted disturbances.....IEC 61000-4-6  
 Power frequency magnetic field immunity.....IEC 61000-4-8  
 Short interruptions and voltage variations immunity...IEC 61000-4-11  
 Harmonic current emissions.....IEC 61000-3-2  
 Voltage changes, voltage fluctuations and flicker...IEC 61000-3-3

### Dimensions (Unit: mm)



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