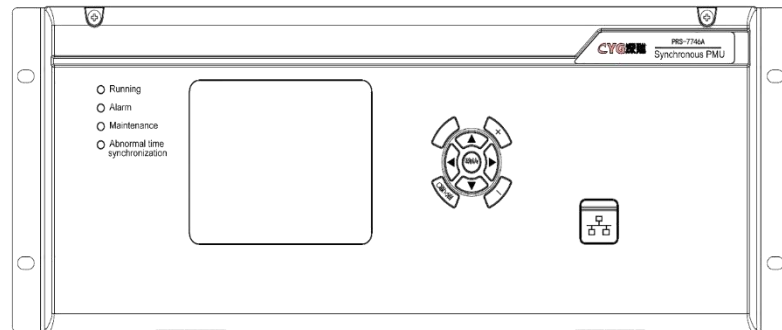


# PRS-7746A **CYG**

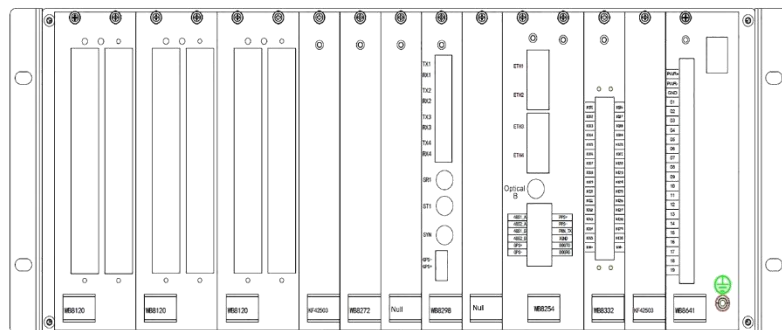
## General Application

PRS-7746A synchronous PMU is mainly used for synchronous phasor measurement and output as well as dynamic recording for the power system. The device is used for measurement of synchronous phasor and absolute phase angle of voltage and current at all nodes of the entire system by means of clock synchronization and digital signal processing technologies.

It provides necessary original data and realization means for such functions as wide-area monitoring of the entire system, substation automation measurement and control, stability control, and adaptive relay protection.



❖ Front Panel



❖ Rear Panel

## Feature

Item	Parameter
Performance	32-bit high performance dual-core processor, internal high speed bus and intelligent I/O ports
Hardware	Modularized hardware design, flexibly configurable, easy extension
Interface	The human machine interface (HMI) with a small control
Communication	Ethernet network, RS-485 serial ports. Communication protocol optional: IEC61850, IEEE 1344, IEEE C37.118 .
Time Synchronization	IRIG-B
Analog	Support the protocol IEC60044-8, constantly measures and calculates voltage, current, power and frequency.
Recording	Operation reports, supervision, time tagged sequence of event.

## Functions

Item	Parameter
Measurement	Conventional CT/VT sampling method with AC AI module in using electrical cable (80 samples per cycle) Transducer input in DC for temperature, humidity, etc.
Configurable	Programmable binary input Programmable binary output Programmable software function
Function	Synchronous Phasor Measurement PMU Acquisition Unit Function Self-diagnostic Device power supply supervision
Event Recorder	512 latest operation reports, 512 latest supervision records, 512 latest SOE
Synchronization	Supporting PPS, IRIG-B, PPM and SNTP etc.

## Specifications

### Measurement Range and Accuracy

Metering Item	Range	Accuracy
Phase range	0° ~ 360°	≤ 0.5% or ±1°
Frequency	35.00Hz ~ 70.00Hz	≤ 0.01Hz
Current	0.05In<I<1.4In	±0.1%In
Voltage	0.05 Un<U<1.2Un	±0.1%Un

### Auxiliary Power Supply

Reference	IEC 60255-1, IEC 60255-26
Rated voltage	110/220VDC
Variation	80% ~ 120%
Frequency	50/60Hz, ± 5Hz
Maximum interruption time in the auxiliary DC voltage without resetting the IED	0%Un,100ms; 40%Un,200ms; 70%Un,500ms At the Un=DC220V
Gradual shut down / Start up	Class C (60s shut down ramp, 5 min power off, 60s start up ramp)
Ripple in the DC auxiliary voltage	Class A (15% of rated @200Hz, 220VDC)
Maximum load of auxiliary voltage suppl	≤10W (normal state), ≤15W (maximum state)

### Binary input

Reference	IEC 60255-1, Clause:6.10.5
Binary input number	Up to 32
Rated voltage	110/220VDC
“ON” value voltage	70% ~ 120% rated voltage
“OFF” value voltage	< 55% rated voltage
Maximum permitted voltage	120% rated voltage
Resolution of binary input signal	≤ 1ms
Resolution of SOE	≤ 1ms

## Specifications

### Binary output

Reference	IEC 60255-1
Binary output number	4
Output model	Potential-free contact
Max system voltage	380Vac, 250Vdc
Voltage across open contact	1000V RMS for 1min
Continuous carry	5.0A @ 380Vac; 5.0A @ 250Vdc
Short duration current	30A, 0.2s 10A, 1s
Breaking capacity	0.60A @ 48Vdc, L/R=40ms 0.10A @ 110Vdc, L/R=40ms 0.05A @ 220Vdc, L/R=40ms
Pickup time	< 10ms
Dropout time	< 8ms