HYC-2600 Series Outdoor Automatic Remote Feeder Terminal Unit(FTU)

Summary

The power distribution automation system is consist of the main substation, data communication system and feeder automatic terminal which is the connector of automatic system and primary device.

FTU Power distribution automatic telemetry terminal (HY-PFT2C2W) is the core unit of HYS-8000B power distribution automatic system. It is mainly used to collect AC measurement (voltage, current), statement local (position of switch), and order of remote control. It is widely used in 12kV power distribution system which can monitor and control the LBS, sectionalizer, ring main unit switch.

FTU power distribution automatic remote terminal adopts the principle of the third microcomputer protection hardware.

This device is able to improve the ability of RS232, RS485 wave load and communication. To match to the communication part, it can communicate with main substation to monitor and control the power system.
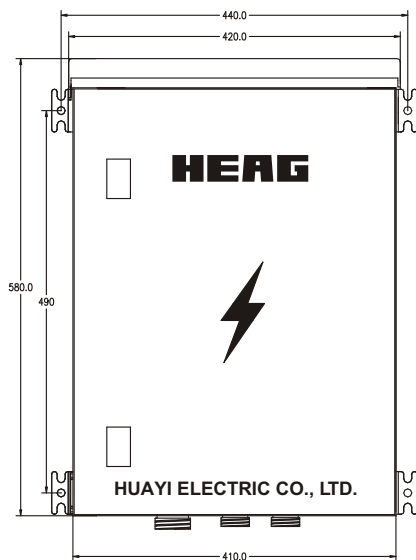
Product feature

1. FTU Power distribution automatic terminal adopts the design principle (micro-computer protects hardware), which improves the reliability of the hardware. There is 16 bit A/D CMOS chip on the measurement part and high speed and high precision module conversion (A/D) on the protective part. And there is dual-monitoring for the exit signal to make sure the reliability.

2. There is many signal insulated method (electromagnetism insulation, photoelectricity insulation) in the external part of FTU power distribution automatic terminal to improve the capacity of anti-jamming, and it also has the high precision measurement function. The input signal change in the range of 45-55Hz, it can implement the function of information collecting.

3. In the software of the power distribution automatic terminal, there is some intelligent arithmetic which can do fault insulate, network re-form, supply re-connect and so on, when the device has lost it communication ability. It can store various fixed value.

4. The typical configuration of FTU power distribution automatic terminal has two kinds of outgoing method (one or two), it can be set by user.
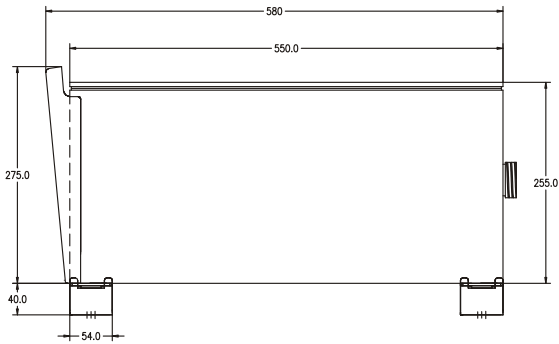
Technical specification

Rated data		Power consumption	
DC voltage	+24V(runnning voltage)	Power consumption (include fibre-optic signal transmit power)	≤5W
AC voltage	100V or 220V(should be specified in the order)	Whole set power loss	≤7W
Work voltage	220V(PT secondary side)	AC voltage circuit	≤0.03VA/phase
AC current	5A	AC current circuit	≤0.7VA/phase
Frequency	50Hz	AC loop over load capability	
Battery bank data		AC voltage	Continuous work 1.2Un
Voltage	+24V(2*12V DC battery series)	DC current	Continuous work1.2Un it can up to 20In if it continuous 1s
Capacity	7AH		

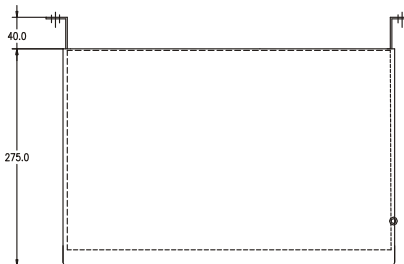| Device accuracy			Anti electromagnetic interfere performance		
Current / voltage	$< \pm 0.5\%$		Impulse inteference test	Common mode 2.5kV/100kHz,1MHz	
Active power / reactive power	$< \pm 0.5\%$			Differential mode 1.0kV/100kHz,1MHz	
Frequency	$< \pm 0.02Hz$		Transient inteference test	It can afford the 4 class transient interference test	
Fault current test accuracy					
Fault curent accuracy	3 class		Ambient condition		
Current check scope	5A-1 00A		Work temperature		
Accident sequence record			Relative humidity		
SOE resolution ratio	5ms		Air pressure		
Two accident treat ability	$\leqslant$25ms		Mechanical performance		
Insulation performance			Work condition	1 serious class of vibrant response, impulse response test	
Insulation resistance	Above 500M		Transmit condition	1 serious class of vibrant response, impulse response test	
Power frequency withstand voltage	AC remote loop	2KV/50Hz 1min	Communication protocol		
	Remote communication loop	500V/50Hz 1min	HuaYi 101		
	Power circuit	2.5KV/50Hz 1min	IEC870-5-101	Select	
	Between relay winding and connect site	500V/50Hz 1min	Others		
	Between primary and secondary of photoelectricity	500V/50Hz 1min	Total weight	40kg	
Impulse voltage	Among each device loop	8KV/0.5J 1.2/50	Total dimension	500x440x250(mm)	
	Between each device and earth	8KV/0.5J 1.2/50	Suitable cable	7-10m (it should be specified and select in the order)	

Outline demension

Front view

Side view

Top view