HPMS series: hybrid-powered compact hydro- and meteostations

Product description

Our life is very weather-dependent. All atmospheric and terrestrial phenomena influence our lives and sometimes significantly change our plans. Transportation and agriculture are especially influenced by the climate. So we need a constant weather monitoring, which allows us to make short- and long-term forecasts. And we need automatic instruments to make monitoring network data representative.

HPMS is a series of hybrid solar-wind powered meteostations comprising complete autonomous meteorological solution. It has a compact design with a number of sensors onboard for most widely used parameters measuring: air temperature and humidity, wind speed and direction, precipitations intensity, solar radiation, soil temperature and humidity, water or snow level. SDI-12 interface allows to easily extend sensor set. Optional video camera allows to obtain online snapshots or live video from the observation point.

HPMSs are designed for the automatic remote meteostations, hydroposts, snow-metering stations networks without maintenance. They have a very simple installation and easy in operation to be widely used in agriculture. They are cost-effective and also suitable for educational purposes.

Features and advantages:

- *Hybrid power system provides weather-independent power supply.*
- *Completely self-consistent, no wires, no maintenance.*
- *It starts to work at very weak wind thanks to the patented generator.*
- *High protection against harsh environments. UV-stable. polycarbonate shell, waterproof and shock resistant.*
- *All sensors needed are onboard.*
- *Video or terrain photos available (optional).*
- *Wireless data transmission. Remotely controlled.*
- *Simple network connection.*
- *Cost-effective.*
- *Compact design, very simple installation.*

NanoPower Generation Ltd
Ulysses House, Foley Street,Dublin 1, Ireland
T:+353 1 888 10 04 F:+353 1 888 1005
E:info@nanopwr.com W:www.nanopwr.com

HPMS		Description
Model:		HPMS-XXXXXXXXX
Dimensions	HPMS-THDSPRV	900x300x300
	HPMS-THDSRV	700x300x300
	HPMS-THDS	600x300x300
Wind energy harvester		12V 2W
Solar Panel	Types and sizes	12V 30W-10W
Accumulator battery		12V 14Ah-2Ah
Sensors	Air temperature (T)	-50-60C
	Air humidity (H)	0-100%
	Wind direction (D)	360
	Wind speed (S)	0-40 m/s
	Precipitations (P)	0-200 mm
	Solar radiation (R)	0-1000 W/m2
	Soil temperature (O)	-50-60C
	Soil humidity (I)	0-100%
	Water (snow) level (L)	0-20 m
	Video/photo (V)	320x240, 640x480, 1Mpx
Data transmission		Radio ISM, GSM/GPRS, satellite Iridium
Interface		RS-232, SDI-12
After full charged, the using time		>30 days
Charging time		6h
Work life		5-10 years
Material		PC ; ABS
Product features		Impact-resistant, durable
		Hybrid wind and solar charging, low wind operation
		Wireless data transmission, remote control

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