

Technical Specifications

V-GPSA/V-GPS-TX GPS Master Clock

- Pre-programmed up to 10 server addresses for continuous, accurate synchronization (with web interface software upgrade)
- RS485 input and output for time correction and synchronization
- Automatic bi-annual daylight savings time changes (when used as a primary master clock)
- Microprocessor based
- GPS Correction
- LED display for a clear, accurate read out
- Ten year battery backup for timekeeping



V-GPSA Wired, Rack Mount



V-GPSA-TX
Wireless, Surface Mount

Description:

The V-GPSA Wired Master Clock and V-GPSA Wireless Master Clock receives accurate time updates via GPS satellites. Interfaces directly with Valcom Analog and Digital Clock Systems.

SPECIFICATIONS

VOLTAGE INPUT

85-265 Vac
50/60 Hz

INPUT

SNTP, Wireless repeater, RS485, 58-minute correction to 59-minute correction, National Time and Rauland and Dukane Digital

INPUT SENSITIVITY

-103dBm

TRANSMITTER

V-GPSA-TX only

TRANSMITTER FREQUENCY

915-928 MHz frequency hopping technology

ANTENNA

Thread mount bullet on 0.75in conduit

OUTPUT

RS485 and 2 clock circuits

OPTIONAL OUTPUTS

Valcom Wireless Communication

RF SIGNAL OUTPUT

30 dBm (1-Watt)

DISPLAY

12 or 24-hour mode

TIME BASE

Crystal

CALENDAR

Built-in calendar with leap year

STANDBY TIME KEEPING

Ten (10) years

ENVIRONMENT

Temperature: : 32 to 113 °F (0 to 45 °C)

HOUSING & FINISH

Smooth surface metal case; color, black

DIMENSIONS AND WEIGHT

11.00in L x 17.50in W x 1.75in D
(27.94cm x 44.45cm x 4.45cm)

Weight: 6.50lbs (2.90kg)

Shipping Weight: 11.00lbs (4.95kg)

Antenna: 3.04in Dia x 2.94in H (1.37cm x 1.32xm)

MOUNTING

V-GPSA Rack Mount

V-GPSA-TX Surface Mount

2022 Rev. 7.8.25

Technical Specifications

ARCHITECTS AND ENGINEERS

The Master Clock, model V-GSPA/V-GSPA-TX shall be a microprocessor based master clock consisting of a 12 or 24 hour 0.56in LED display and two buttons for programming. The V-GSPA/V-GSPA-TX shall have a built-in web interface to program, control and monitor the master clock from any computer connected to the same LAN without any additional software. The V-GSPA/V-GSPA-TX shall have RJ45 input for web interface and synchronization to any (S)NTP/NTP server and shall have the ability to store up to 10 different server addresses for continuous accurate time and redundancy.

The V-GSPA/V-GSPA-TX Master Clock shall automatically switch from one accurate time source to another in case of a communication failure and shall include a blinking LED on front panel to visually indicate a communication failure with the NTP server or GPS time source. If equipped with a transmitter, The V-GSPA/V-GSPA-TX shall control wired clock systems or wired and wireless clock systems simultaneously. The V-GSPA/V-GSPA-TX shall include automatic fully customizable Daylight Saving Time updates. The V-GSPA/V-GSPA-TX bias seconds option shall offset the master clock to adjust the time plus or minus a few seconds or minutes to fit the application, while it is still receiving accurate time input. The V-GSPA/V-GSPA-TX shall have DHCP capable. The V-GSPA/V-GSPA-TX shall contain two relay circuits that can produce synchronous wire data in the form of 59 minute correction protocol, 58 minute correction protocol,

National Time/Rauland or Dukane Protocol. The V-GSPA/V-GSPA-TX shall have a ten year battery backup for keeping time and master clock setting.

The V-GSPA/V-GSPA-TX Master Clock voltage input shall be 85-265 Vac 50/60 Hz. Input sensitivity shall be -103dbm. V-GSPA/V-GSPA-TX shall have 2 clock circuits and RS485 outputs, Valcom Wireless Communication optional output shall be used with the V-GSPA-TX only.

The V-GSPA/V-GSPA-TX Master Clock RF signal output shall be 30 dBm 1-Watt. V-GSPA/V-GSPA-TX shall use frequency-hopping technology to receive time data on a frequency range of 915-928 MHz. Operation temperature shall be 32 to 130 °F (0 to 45 °C) The antenna shall be a thread mount bullet on 0.75 conduit and include 75 ft of RG58. Optional: up to 150 ft of RG59 may be utilized.

The V-GSPA/V-GSPA-TX Master Clock case shall be constructed of smooth surface metal with black finish.

Maximum dimensions shall be 11.00in L x 17.50in W x 1.75in D (27.94cm x 44.45cm x 4.45cm). Weight shall be approximately: 6.50bs (2.90kg).

Warranty information may be found on our website at www.valcom.com/warranty.