



V-GSPA-NTP GPS Corrected NTP Master Clock



The 19" Rack Mountable V-GSPA-NTP GPS Corrected Master Clock is an NTP server. This means that it can generate NTP or SNTP time data. This time data can then be sent over a wired computer network to any other networked machine that accepts NTP/SNTP time data. It provides a variety of clock correction protocols. In addition to RS485 for Valcom 2-wire digital correction, it provides:

- 1) 58th Minute (1) - The master clock performs an hourly correction that takes 55 seconds and occurs between XX:58:05 and XX:59:00 of every hour. It also performs two daily corrections: one at 5:00AM and another at 5:00PM. Each daily correction is ten relay cycles, each cycle is 95 seconds long, and the cycles begin at 5:05AM/PM, 5:07, 5:09, 5:11, 5:13, 5:15, 5:17, 5:19, 5:21, and 5:23 respectively.
- 2) 58th Minute (2) - The master clock performs an hourly correction that takes 60 seconds and occurs between XX:58:00 and XX:59:00. It also performs two daily corrections: one at 5:00AM and one at 5:00PM. Each daily correction is made of twelve relay cycles, and each cycle consists of 65 seconds on and 25 seconds off
- 3) 58th Minute (3) - The master clock performs an hourly correction that takes 60 seconds and occurs between XX:58:00 and XX:59:00. It also performs two daily corrections: one at 5:00AM and one at 5:00 PM. Each daily correction is made of twelve relay cycles, and each cycle consists of 60 seconds on and 120 seconds off.
- 4) 58th Minute (4) - The master clock performs an hourly correction that takes 55 seconds and occurs between XX:59:05 and XX:59:00. It also performs two daily corrections: one at 5:00AM and one at 5:00PM. Each daily correction is made of twelve relay cycles, each cycle is 55 seconds long, and the cycles begin at 5:03:05AM/PM, 5:07:05, 5:11:05, 5:15:05, 5:19:05, 5:23:05, 5:27:05, 5:31:05, 5:35:05, 5:39:05, 5:43:05, and 5:47:05 respectively.
- 5) 59th Minute - The master clock performs an hourly correction that takes 8 seconds and occurs between XX:57:54 and XX:58:02. It also performs two daily corrections: one at 5:00AM and one at 5:00PM. Each daily correction is a single 14 second pulse which lasts from 5:57:54 to 5:58:08.
- 6) National time & Rauland (1) - The master clock performs an hourly correction that takes 25 seconds and occurs between XX:00:00 and XX:00:25. It also performs two daily corrections: one at 6:00AM and one at 6:00PM. Each daily correction is made of twenty four relay cycles consisting of 25 seconds on, followed by 35 seconds off.
- 7) National Time & Rauland (2) - The master clock performs an hourly correction that takes 25 seconds and occurs between XX:00:00 and XX:00:25. It also performs two daily corrections at 6:00:25AM and 6:00:25PM. Each daily correction is a single 24 minute pulse which lasts from 6:00:25AM/PM to 6:24:25.
- 8) Once a Day Pulse - The master clock relay will close at a specific time and for an amount of time decided by the clock circuit settings (Settings 21-23 for circuit 1, or 26-28 for circuit 2).
- 9) Rauland Digital - The master clock will reset the secondary clock to 12:00:00AM, then advance the time on the secondary clock by one minute for every 0.5 seconds that the Digital line is shorted to ground.

A rooftop GPS Antenna is included. The V-GSPA-NTP is Built and Supported in the U.S.A.

The clock is powered by 120VAC 60 Hz. Use a suitable voltage adapter if required.

The clock is FCC part 15 listed.



Current as of December 2015

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Revised 1/2017