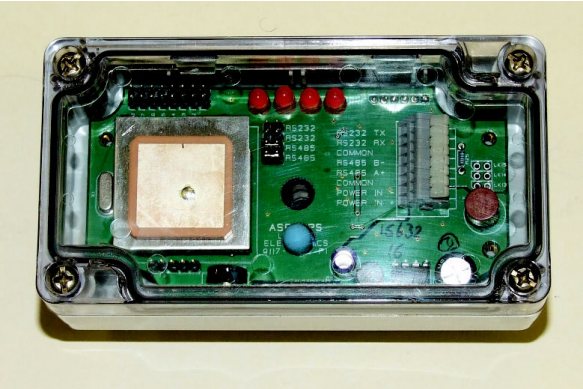
GPS based atomic time standard - Model ASR-GPS



- **Simple to install and commission**
- **Compatible with London clock displays**
- **In-built antenna, just point at the sky**
- **DC powered, for portable/mobile use**
- **Synchronises up to 32 clocks**
- **Sealed for outdoor use**
- **Clear Plain English operating manuals**
- **Network TimeServer software option**

Operating manuals and more technical detail available at **http://london-electronics.com**

Specifications

Connections

Power supply	11 to 30 V DC at up to 50mA.
	Typically 25mA at 24VDC
Data output	RS485 or RS232, 9600 baud
	8 data bits, no parity, 1 stop bit
	1 transmission per second.

Timing

Precision	Within +/- 1 second
Summer/winter time	Automatic correction
Time Zone setting	Set with PC configuration application

Cabling

Cable dimensions	Screened cable 4.5 to 6.5mm dia.
Cable type	CAT5 preferred

Case

Case sealing	IP65
Case Material	Polycarbonate
Flammability Class	V0 (UL94)
Case width	115.0 mm
Case thickness	40.0 mm
Case height	65.0 mm
Cable gland height	20.0 mm
Typical weight	175 grams
Operating conditions	0 to 50 degrees C
Storage conditions	-20 to +70 degrees C

If you want to guarantee all your clock displays are reading the correct time, the ASR-GPS time standard is ideal.

It receives precise time updates from the GPS satellite network, anywhere in the world, and contains a precision backup timer to maintain data output if the satellite signal is temporarily lost.

It provides and ASCII data output of time and date, with summer and winter time correction.

You can configure the receiver to send one of 3 data formats ...

1) HHmmSSDDMMYY [DN] [SOURCE] [DST] [TZ],xxx.x[U]<CR><LF>
2) CCYYMMDDTHHmmSS [DN] [SOURCE] [DST] [TZ],xxx.x[U]<CR><LF>
3) CCYY-MM-DDHH:mm:SS [DN] [SRC] [DST] [TZ],xxx.x[U]<CR><LF>

HH is hours 00-23
mm is minutes 00-59
SS is seconds 00-59
DD is date 01-31
MM is months 01-12
YY is years 00-99
CC is century 00-99

[DN] is Day of Week 1-7, 1 character
Sunday is day 1, Monday is day 2 etc

[SOURCE] is the time source, 3 characters
GPS or RTC (GlobalPositioningSatellite live data or RealTimeClock internal reference)

[DST] is Daylight Saving flag, 1 character, 0 or 1
1 = daylight saving correction has been applied

[TZ] is time zone adjustment applied.
5 characters, +1200 to -1200
Zero offset has a space instead of +/-

,xxx.x is temperature if temperature option installed, or ,---.- if not

[U] is either C for degrees C or F for degrees F

Where to mount your ASRGPS...

A single ASR-GPS can synchronise up to 32 EasyReader or Fusion clocks in your factory.

You can connect the clocks to the ASR-GPS with 3 core screened data cable, CAT5 cable etc.

The ASR-GPS must be able to 'see' the sky, so you can mount it under a skylight, or on an outside wall. Avoid mounting it within the factory or under eaves etc.

If your ASR-GPS includes the outdoor temperature sensing option, mount it on a North-facing ouside wall if you are in the northern hemisphere, or a South-facing outside wall if you are in the southern hemisphere, so it will avoid the heating effect of direct sunlight.

Ordering Code: ASR-GPS

Temperature sensor option: Select 0 or TEMP
With network timeserver software: Select 0 or SERVER

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