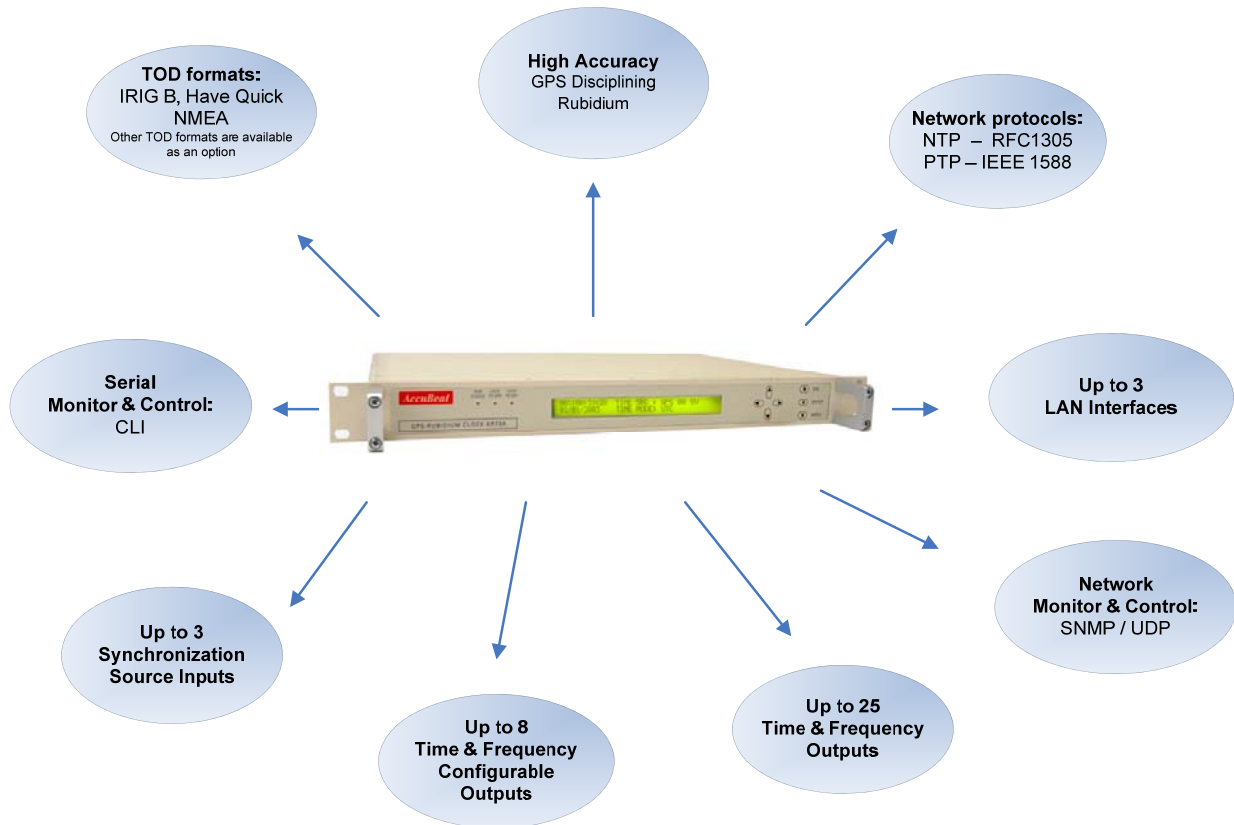


## AR76R - Multi Function Accurate Time & Frequency System

### GPS - Disciplined Rubidium Clock



**Main Features:**

- Frequency Accuracy :1E-12
- ADEV: 3E-11@1s, 6E-13 @ 10,000s
- 1PPS Accuracy: 5ns RMS (25°C)
- Free run Time drift (no GPS reception): 1 µs/ day (25°C)
- Free run Frequency drift: ≤ 5E-11 / month
- 25 outputs (10 Coaxial +15 on 44 pin D Type)
- Network time server (NTP) per RFC1305
- External inputs (1PPS or frequency) for disciplining
- 12 channel C(A) code GPS receiver (AR76) or P (Y) code SAASM (model AR77)
- Front panel display (Time, Date, BIT and various other parameters)
- Monitor & control: by LAN (UDP & SNMP) and by RS232 / RS422
- Supply Voltage: 90/260 VAC (28V DC or redundant -48V DC as an option)

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## AR76R - Multi Function Accurate Time & Frequency System

### GPS - Disciplined Rubidium Clock

**Accurate Time & Frequency** play a crucial role in most modern electronics equipment. The wide spectrum of applications for Time and Frequency encompasses the fields of Navigation, Communications, Identification, Remote Sensing, Intelligence, and Weapons. Interoperability of systems on different platforms as well as interoperability of elements on the same platform requires all units and elements of the operating forces to be referenced to the same time. To date, most of these systems rely on GPS for accurate reference Time and Frequency. However, it has been well recognized that the GPS system could be easily **jammed, spoofed or blocked**; thereby posing a serious threat on the performance of system.

The AR76R/AR77R **GPS-Rubidium clocks** provide a comprehensive solution to the above electronics systems. These models comprise a Rubidium Clock, a GPS receiver and a sophisticated servo-loop that locks the Rubidium Clock on the GPS signal. When the GPS is interrupted for short or for the long term, the Rubidium clock backups and maintains Time & Frequency with great accuracy. This combination improves the accuracy and stability of both the GPS and the Rubidium and at the same time **substantially reduces the dependency of the system on the availability of the GPS, thus mitigating the GPS vulnerabilities.**

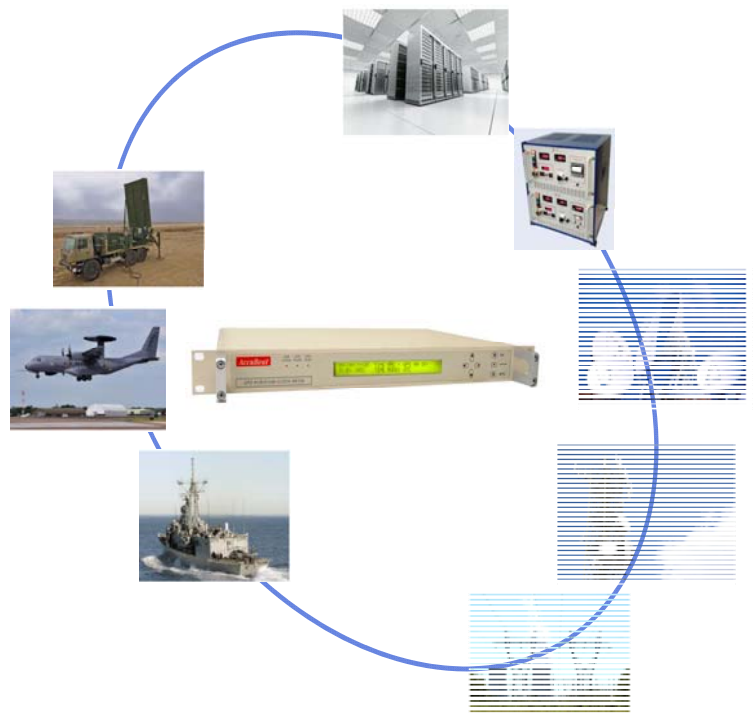
The AR76R family includes many models for different applications, like **military** applications, **telecom** applications, general purpose applications and more. See AR76 data sheet for more details and how to order information.

#### **Applications:**

*Accurate Timing and Frequency are essential in:*

- *C5I*
- *Secure communication*
- *Navigation*
- *EW*
- *ELINT and COMINT*
- *Wire line telecommunication systems*
- *Cellular phone base stations*
- *Local area networks synchronization*
- *Power plants*
- *Telemetry tests fields and test equipment*
- *Satellites communication*

*Amongst numerous other applications*



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