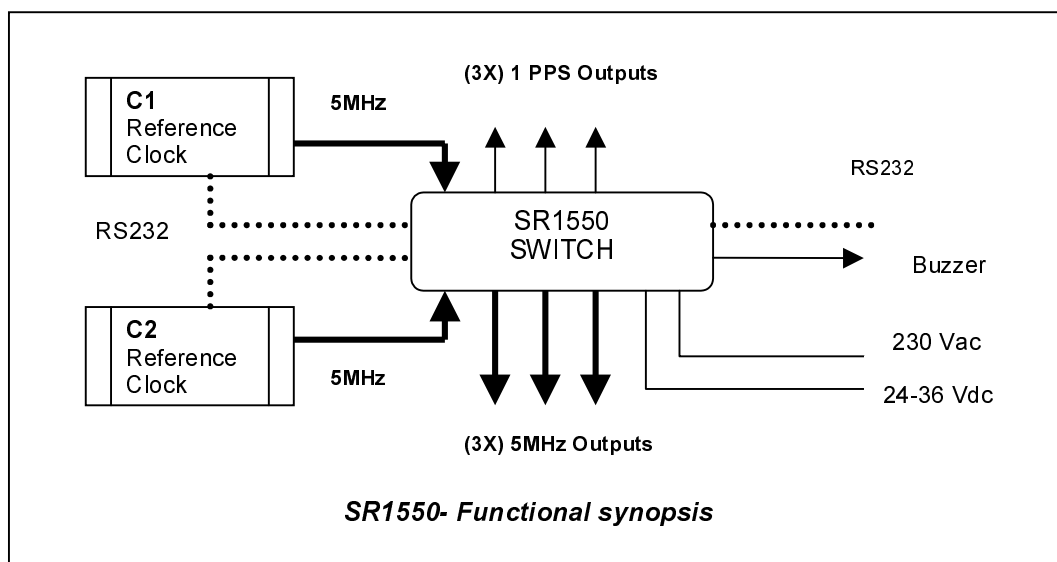


SR1550

ATOMIC CLOCK SWITCHING EQUIPMENT

Features

- Allows automatic or manual switching of 2 frequency reference sources coming from atomic mothers clocks (MASER, CESIUM, RUBIDIUM) and distribution of the signal. The automatic switch occurs on failure detection of the input signal (No signal or level) or signal quality problem detection via the remote control of the sources under monitoring.



- The equipment generates & distributes a 5 MHz amplified signal (22dBm) with the same stability than the input selected source, with a shift phase minus than 10^{-9} second as well as a top synchro second signal (1 PPS).

The phase alignment uses the selected input frequency source or the 1 PPS reference signal provided by a GPS module.

- The SR1550 is able to manage two types of reference clocks :

The 5071A Hewlett-Packard type

The EFOS16 Maser type from Neufchâtel Observatory

- The switching rules for each type of reference sources are specifics. The parameters under survey are :

	CESIUM	MASER
Parameters (*)	Closed loop status Tension value of the ionic pump Tension value of the electron multiplier	PLL error signal OCXO varactor control Amplitude of maser signal at 5.7 KHz PLL lock flag
Generated logical status	Continuous operation Alarm	Varactor Amplitude Lock

(*)Time between each parameter acquisition : 5 s

The combination of the logical status are used to generates the alarm

SR1550

ATOMIC CLOCK SWITCHING EQUIPMENT

Specifications

- **Remote control & reference clock links:** asynchronous serial link. RS232 level. SubD 9 pins male connectors for clock links. SubD 9 pins female for remote control.
- **5 MHz inputs:** N standard type connector (isolated), 50 Ohms, input level : +7 to +15 dBm, alarm generated when signal level < +7 dBm
- **5 MHz outputs :** N standard type connector (isolated), 50 Ohms, outputs isolation : 60 dB
- **1 PPS outputs :** N standard type connector (isolated) and BNC, 50 Ohms. Level : 0/8V, front : 10% to 90% on 50 Ohms. Pulse width : 100µs at 2.5V.
- **Dimensions :** Width = 19" (483 mm), Height = 3U (133 mm), Depth = 351 mm.
- **Weight :** 15 Kg
- **Consumption :** 60 W
- **MTBF =** 65 000 h

Ordering information

SR1550 – F : French version

SR1550 – X : English version



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