

## Ultra Stable Rubidium Atomic Clock



| <b>Description:</b>                     |   |                         |                          |
|---|---|-------------------------|--------------------------|
| 1. For time-frequency systems;          |   |                         |                          |
| 2. Ultra low phase noise;               |   |                         |                          |
| 3. External frequency self-calibration. |   |                         |                          |
| Input frequency (MHz)                   | 10  |                         |                          |
| Input level (dBm)                       | 5~10  |                         |                          |
| Frequency range (MHz)                   | 2 Outputs 10/2 Outputs 100  |                         |                          |
| Output level (dBm)                      | $\geq +7$   |                         |                          |
| Output waveform                         | Sine  |                         |                          |
|   | Internal OCXO   | Internal Rubidium Clock |                          |
| Frequency temperature stability         | 5E-9  | 1E-10                   |                          |
| Steady                                  | 1s  | 1E-11                   | 1s 1E-11                 |
|   |   |                         | 100s 8E-12               |
| Aging rate                              | $\pm 5E-10/\text{day}$  |                         | $\pm 2.5E-11/\text{day}$ |
|   | $\pm 5E-9/\text{Month}$   |                         | $\pm 1E-10/\text{Month}$ |
| Frequency accuracy                      | --  | 5E-11                   |                          |
| Spurious (dBc)                          | $\leq -70$  |                         |                          |
| Harmonics (dBc)                         | $\leq -20$  |                         |                          |
| Phase Noise                             |   | @ 10MHz                 | @ 100MHz                 |
|   | dBc/Hz@ 1Hz   | -100                    | -80                      |
|   | dBc/Hz@ 10Hz  | -130                    | -98                      |
|   | dBc/Hz@ 100Hz   | -140                    | -125                     |
|   | dBc/Hz@ 1kHz  | -155                    | -155                     |
|   | dBc/Hz@ 10kHz   | -160                    | -160                     |
|   | dBc/Hz@ 100kHz  | -160                    | -170                     |
| dBc/Hz@ 1MHz                            | -160  | -170                    |                          |
| Power supply (V/mA)                     | +12V/2000(Warm up) +12V/850(Steady)                                       |                         |                          |
| Connector                               | RF connector: SMA-KFD<br>Control and power connector: Through capacitance |                         |                          |
| Dimensions                              | 6U cPCI/120×70×20mm   |                         |                          |
| Control                                 | --  |                         |                          |
| Operating temperature (°C)              | -10~+70   |                         |                          |
| Storage temperature (°C)                | -55~+85   |                         |                          |

