



# OSA 3235B Cesium Clock

## Metrological Reference Clock Source using the Digital Cesium technology

### Cesium performances characteristics

<input type="checkbox"/>	Frequency accuracy	$1 \times 10^{-12}$
<input type="checkbox"/>	Reproducibility	$\pm 1 \times 10^{-12}$
<input type="checkbox"/>	Short Term Stability :	$\pm$ <b>ADEV</b>
<input type="checkbox"/>	1s	$1.2 \times 10^{-11}$
<input type="checkbox"/>	10s	$8.5 \times 10^{-12}$
<input type="checkbox"/>	100s	$2.7 \times 10^{-12}$
<input type="checkbox"/>	1'000s	$8.5 \times 10^{-13}$
	10'000s	$2.7 \times 10^{-13}$
	100'000s	$8.5 \times 10^{-14}$
	5 days	$5 \times 10^{-14}$
	30 days	$5 \times 10^{-14}$
	Floor	$5 \times 10^{-14}$
<input checked="" type="checkbox"/>	Settability: Resolution	$< 1 \times 10^{-15}$
	Range	$\pm 1 \times 10^{-9}$
<input checked="" type="checkbox"/>	Warm-up time	45 minutes @ 25°C

### Outputs

Direct outputs:	5MHz	10MHz
<b>Amplitude SSB</b>	$1V_{rms}$ <input type="checkbox"/> 0,2@50 <input type="checkbox"/> $1V_{rms}$ <input type="checkbox"/> 0,2@50 <input type="checkbox"/>	
<b>Phase</b>		
1Hz	-106dBc/Hz	-100dBc/Hz
10 Hz	-136dBc/Hz	-130dBc/Hz
100Hz	-145dBc/Hz	-145dBc/Hz
1,000Hz	-150dBc/Hz	-150dBc/Hz
10,000Hz	-150dBc/Hz	-150dBc/Hz
100,00Hz	-155dBc/Hz	-155dBc/Hz

Auxiliary outputs	Analog	Timing Outputs
Number	1	3
Frequency	0.1-50MHz	1PPS/1/5/10MHz
Output level:	Typ. $500mV_{rms}$ @50Ω $\geq 3V$ @ 50Ω (min. $250mV_{rms}$ )	
Output shape	Sine	square or pulse
Connector	BNC	BNC

### Synchronization input

Number	2(1x front + 1x rear side)
Input type and connector	1PPS TTL ( $\geq 3V$ )-BNC

### Signal expansion (optional)

#### Programmable analog output

Number	1
Programmable Frequency	0.1 - 50 MHz
Output level	Typ. $500mV_{rms}$ @50Ω (min. $250mV_{rms}$ )
Connector	BNC

#### Programmable Telecom outputs

Number	4
Frequency	Configurable: 2.048 MHz / E1 / T1 / 1PPS / 10MHz
Output level	According to G703
Connector	BNC 75Ω (T1: DB-9 100Ω)

### Power Supply

#### Voltage

- 1x230VAC (88V-264VAC 50-60Hz)
- 1x48VDC nominal floating (20V to 60V)
- Power feeds Dual
- Power consumption 60W @25°C (warm-up max. 70W)

#### Optional battery backup

Optional internal battery for 45 minutes of operation without power source

### Management

#### Communication port

Port: RS-232C on DB-9 (1x front + 1x rear side) for local management and / or remotely using SyncView Plus™

#### Alarms

Relay contacts: 3 x alarm indication

#### Front panel LED indication

Monitoring: 6x LED's (3x front + 3x rear) for monitoring Power Supply Status, Operation, Alarms

### Management and Clock expansion<sup>(optional<sup>1</sup>)</sup>

#### Communication port

Management Port Ethernet TCP/IP port on RJ45  
TOD (Time Of Day) 1 x TOD input on DB-9 (m)  
1x TOD output on DB-9 (f) with programmable shift

Display 5.7" tactile LCD display on front side

### Mechanical

19": 3U 132 x 436 x 400 mm (HxWxD) with rear and front access connectors. Adapters for 23" rack standard

Table-top case Optional table-top case  
Weight <15kg (excluding packing)

### Environmental Conditions

Operating conditions	EN300 019-1-3, class 3.2 (temperature range extended from -5°C to +55°C)
Transportation	EN 300 019-1-2, class 2.2
Storage	EN 300 019-1-1, class 1.1
Humidity	Up to 95%
Altitude (operating)	0 - 15'000m
DC magnetic field	$\pm 2$ Gauss maximum
Safety	EN 61010-1
EMC & ESD	EN 50081-1, EN 50082-1 IEC 801 parts 2, 3, 4, 5 and 6 CE compliant

<sup>1</sup>Consult factory for availability

Subject to change without prior notice.



**Contact US**

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