

OSA 5020 Low Noise Distribution

A compact, cost efficient, high quality synchronization distribution solution for OEM and integrators

Introduction

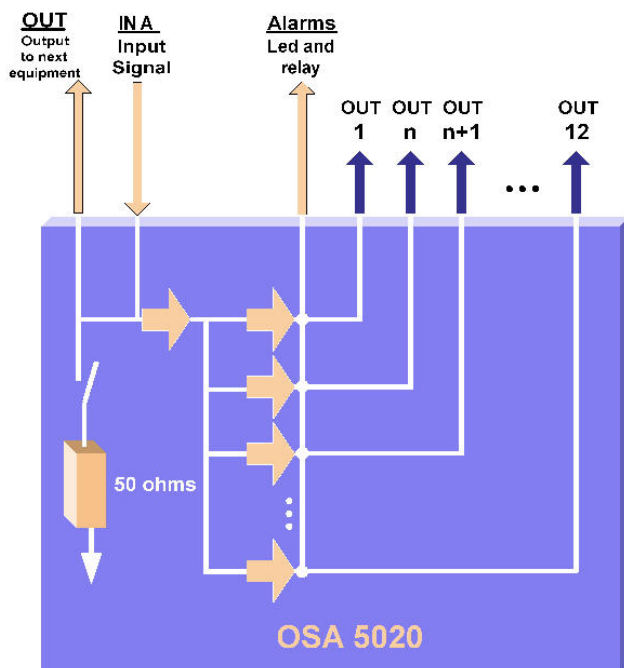
A compact, cost efficient, high quality frequency distribution solution for OEM and integrators.

The OSA 5020 is specifically designed for applications where the phase noise characteristic is extremely important such as satellites tracking stations or time and frequency laboratories.

The OSA 5020 Low Noise Distribution unit is very easy to install. The unit does not require any type of configuration as the output signals are direct image of input signal. The rack-mount unit is easily installed and smoothly integrates with existing equipment.

Typical applications

- Satellite ground stations equipment
- Time and frequency distribution unit
- Any system requesting a low phase noise distribution unit



Highlights

- Reliable, low cost, compact
- Input frequencies 500 kHz to 50 MHz
- 12 outputs low additive phase noise
- BNC connectors for all inputs and outputs
- AC power supply (100-240 Vac)
- OSA 5020s can be placed in cascade to extend total output capacity

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Typical Characteristics

Power supply:

- AC Power supply: 100 to 240 VAC (47 - 63 Hz)
- Consumption: 10 W

Configuration and monitoring:

- Configuration: None
- Monitoring: Alarm contact on Sub-D 9p connector (normally open or closed)

Input specifications:

- Connector: BNC female
- Frequency range: 500 kHz to 50 MHz
- Impedance: 50 ohms
or not loaded: daisy chain
(Selection by switch)
- Nominal level: 1 Vrms
- Input qualification: Loss of signal-Level detection

Output specifications:

- Connector: BNC female
- Frequency range: 500 to 50 MHz
(as input signal)
- Gain: Typ. 1 Vrms < -2dBm (alarm)
- Nominal level: 1 Vrms
- Harmonic distortion: < -40dB
- Non-Harmonic distortion: < -80dB
- Impedance: 50 ohms
- Isolation: > 90 dB, isolation alternative
channels: >100dB up to 30MHz

Environmental characteristics:

- Operating temperature: 0 to 55°C
- Storage temperature: -10° to +60°C
- Humidity: 0 to 95% non condensing
- MTBF: >900'000 hours

EMC, ESD & SAFETY - CE Mark

- EMC, ESD: Certified to EN55022: 2005
and EN55024: 2005
Susceptibility to IEC 801 parts 2,
3, 4, 5 and 6
- Safety: Conformance to EN60950: 2001

Mechanical:

- Mounting: 19" rack mount
- Size: 43 x 484 x 310 mm
(1U x 19" x 12")
- Weight: ~3kg (7 lbs) excluding packing
- Connector access: Rear

Output specifications (continued) :

- Additive SSB Phase noise (1 Hz Bandwidth)

1Hz	-120 dBc
10Hz	-135 dBc
100Hz	-145 dBc
1kHz	-155 dBc
10 kHz	-160 dBc
- Output qualification: Loss of signal
Level detection

Oscilloquartz SA reserves the right to change all specifications contained herein at any time without prior notice.

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