

OSA 5020 Low Noise Distribution

Synchronization Distribution Solution for OEM and Integrators

DIGITAL BROADCASTING

TIME & FREQUENCY



Highlights

- Reliable, low cost, compact
- Input frequencies 900 kHz to 50 MHz
Optional 90Hz to 20 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 daisy chain to extend total output capacity

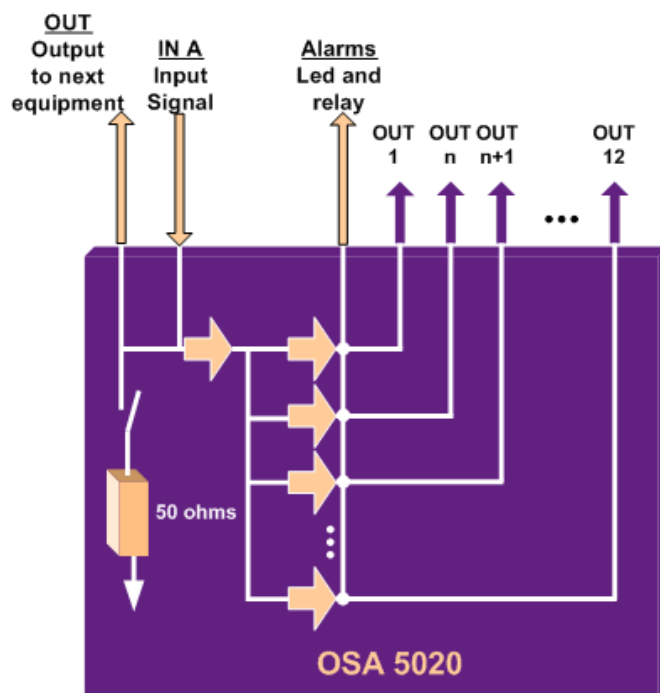
Applications

- Satellite ground stations equipment
- Time and frequency distribution unit
- Any system requiring a low phase noise distribution unit
- DAB/DVB Transmitters

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 satellite 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.



OSA 5020 Low Noise Distribution

Synchronization Distribution Solution for OEM and Integrators

Power supply:

- AC Power supply: 100 to 240 VAC (47 – 63 Hz)
- Consumption: ~20 VA

Configuration and monitoring:

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

Input specifications:

- Connector: BNC female
- Frequency range: 900 kHz to 50 MHz
Optional: 90Hz - 20 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: 900 kHz to 50 MHz
Optional: 90Hz - 20 MHz
(as input signal)
- Gain: 1
- Nominal level: Typ. 1 Vrms
 - Minimum level: Typ. 0.3 Vrms
 - Maximum level: Typ. 1.4 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	-132 dB
10Hz	-150 dB
100Hz	-160 dB
1kHz	-165 dB
10 kHz	-165 dB

Output qualification:

- Loss of signal
- Level detection

Subject to change without prior notice.

