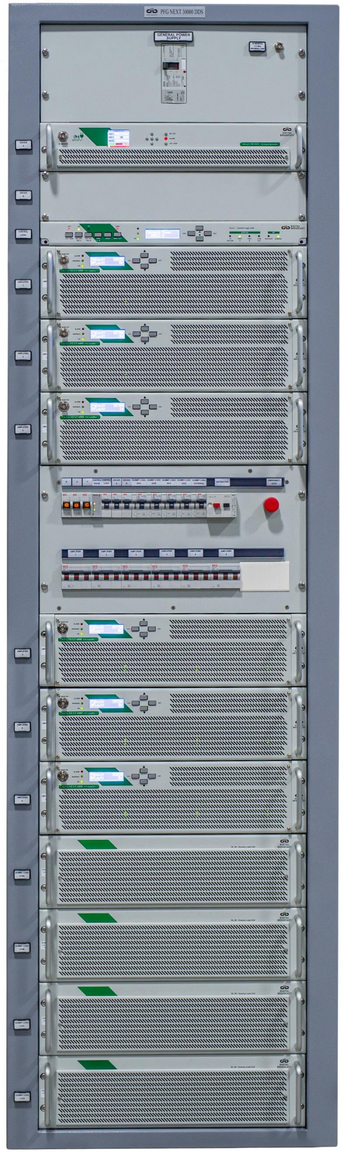
DIGITAL BROADCAST

screen

# PFG & PFG NEXT Series: Modular FM transmitters

# GREEN RF™ TECHNOLOGY



The PFG series of Modular FM transmitters is designed to operate in the whole 87.5 – 108 MHz frequency range for FM radio broadcasting applications and it covers a power range from 100W to 40kW.

## GREEN RF™ technology

The GREEN RF™ technology, combined with the new 65:1 devices, is the latest evolution of the world-famous patented COLD-FET™ technology applied on DB's transmitters. The main advantages are:

- High RF efficiency (>70%)
- Higher safety
- Higher reliability
- Lower heating
- Lower AC power consumption.

# TECHNICAL FEATURES

## Complete remote control

PFG series has an extremely complete Web server and SNMP remote control system, available as option.


# TECHNICAL FEATURES

## Hot plug modules

All PFG NEXT transmitters over 5 kW can be equipped optionally with the hot-plug system to instantly extract the amplifier modules with transmitter in full power.

## High efficiency cooling system

The PFG series cooling system limits the heat-sink temperature rise to only about 10°C above ambient temperature. This guarantees the properly functioning even at high temperatures and in sites with extreme climate conditions.

## Air cooling

The oversized air-cooling system widely extends transistor life. The amplifier modules are equipped with externally mounted redundant fans to allow easy and fast cleaning, or eventual replacement, without opening or removing any module and without interrupting the transmitter operation.

# TECHNICAL FEATURES

## PFG liquid cooling (available option over 5kW)

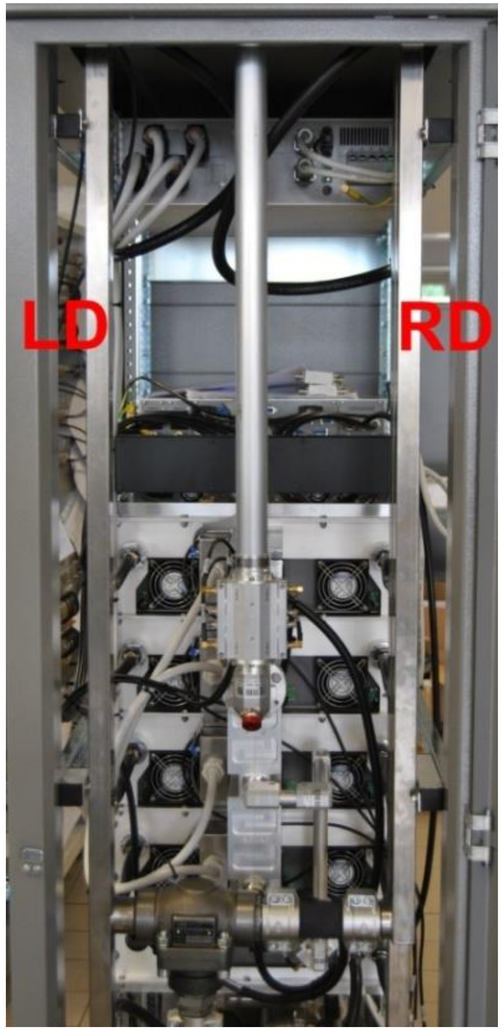
Substantial advantages of our liquid cooling technology compared to air cooling are:

- Properly working even with hard climate conditions.
- Dramatically reduction of air conditioning needing.
- Correct functioning in dusty environment even with high humidity or salinity.
- Very low acoustic noise.
- Low heat radiation into the environment.
- Longer life for transistors and active elements due to colder continuous operation.

## AAD Technology

Prevents corrosion from air moisture and increases reliability.

- Components are made in anticorodal aluminum.
- Air is ducted to avoid contact with electronic parts.
- All electronic boards and cablings are tropicalized with a special resin to protect the circuits against salt air.

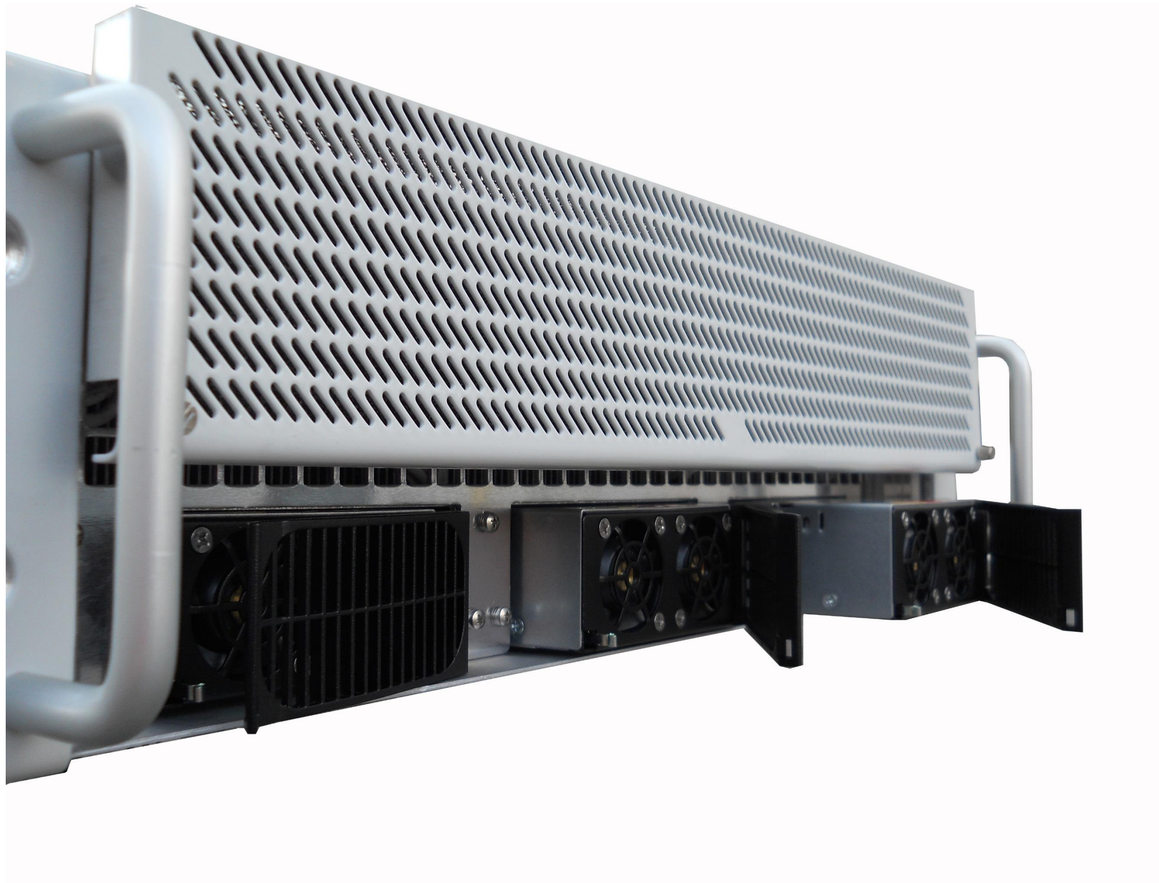


# TECHNICAL FEATURES

## Hot swappable power supply units

The PFG NEXT transmitter series are characterized by the presence of hot swappable power supply units for a simplified serviceability and maintenance.

Their toolless and instant installation from front panel let the PFG NEXT transmitters to be ideal for critical environment systems where no down time can be tolerated.



## Automatic Current Sharing (ACS)

A software controlled automatic current balancing system (ACS) is present on each unit to grant a perfect load distribution and so best power supply operating conditions.

In case of multiple power supplies installed in the transmitter, the system always works balanced without any current overload even in case of failure of one power supply.

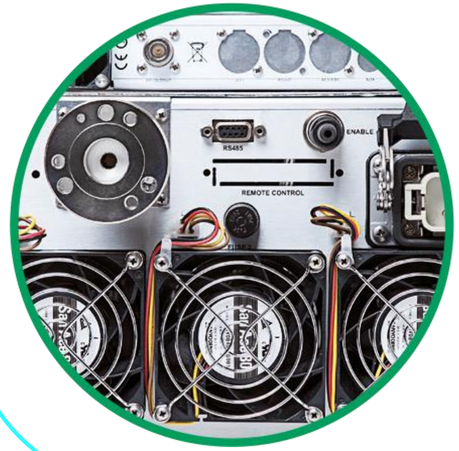
# HIGH EFFICIENCY – EASY MAINTENANCE

## Efficiency Enhancement

Latest generation LD-MOS devices increase DC to RF efficiency up to 85%, with a drastic reduction of energy consumption.


## Easy maintenance, without off-air

Hot-plug fans: 5 minutes maintenance time, no need to open or switch off the unit.




All PFG transmitters over 5kW can be equipped optionally with the hot-plug system to instantly extract the amplifier modules with transmitter in full power.

Hot-plug power supplies: instantly removed from front panel without interrupting the transmission.


www.dbbroadcast.com


www.screen.it