



## FEATURES

- Supports DVB-T/H, DVB-T2, ATSC, ISDB-T/T<sub>β</sub> and analog tv standards
- Available for UHF and VHF bIII bands
- Latest 50V LDMOS technology
- Hot-swappable switching power supply with PFC
- Fully redundant modular construction
- High efficiency for reduced energy costs
- Excellent ruggedness and reliability
- Oversized to increase operational life
- Overtemperature, overcurrent, overvoltage, overdrive and SWR protections
- Remote control interface
- Strong mechanical structure
- 0 dBm RF monitor

### Options:

- 120 VAC input
- EIA 7/8" output connector
- Remote control
- SNMP

## DESCRIPTION

The DF DIAMOND SERIES power amplifier provides the ideal solution when higher digital or analog transmission power is required. It features excellent values on key parameters of the transmitted output signal quality, including shoulder attenuation, MER, and intermodulation.

Each PA is composed of one or more class AB pallet amplifier stages. The latest 50V LDMOS transistors deliver high levels of power density, efficiency, linearity, and ruggedness. Each pallet amplifier has its own individual switching power supply. This ensures high on-air reliability as the PA will continue to operate at reduced power if one or more power supplies fail.

The fully redundant modular design and integrated EMI filter, hot-swappable switching power supply with PFC, control unit display, microprocessor-controlled fans, and SWR, overtemperature, overdrive, overcurrent and overvoltage protections enhance the PA's ruggedness and reliability. A multifunction display unit and USB port on the front panel control all the operating parameters.

RF & COMMUNICATION PARAMETERS	
Operating standards	DVB-T/H, DVB-T2, ATSC, ISDB-T/T <sub>β</sub> , Analog (ATV)
Frequency range	UHF: 470 - 860 MHz VHF bIII: 170 - 240 MHz
Input connector	N female, 50 Ω
RF monitor connector	BNC female, 50 Ω
Working class	AB
External interface	USB, RS-232, RS-485, ethernet (optional)
GENERAL	
Power supply	230 VAC ± 15%, single phase (120 VAC optional)
Operating temperature	-5 °C to +45 °C
Relative humidity	95 %, non-condensing
Cooling	Forced air with temperature-controlled fans
Dimensions (W x H x D)	440 x 133 x 622 mm for 3HE cabinet 440 x 265 x 662 mm for 6HE cabinet
Size	19" 3HE or 6HE
Weight	Max. 28 Kg for 3HE cabinet Max. 60 Kg for 6HE cabinet

BAND	OPERATING STANDARD	MODEL	OUTPUT POWER (Pre-filter)	DRIVER POWER	POWER CONSUMPTION	OUTPUT CONNECTOR	SIZE
UHF	DVB-T DVB-T2 ISDB-T/T <sub>β</sub>	DF-100/UD	130 W	1.5 W	900 W	N	3HE
		DF-200/UD	250 W	3 W	1700 W	DIN 7-16	3HE
		DF-200/UD-L	250 W	150 mW	1750 W	DIN 7-16	3HE
		DF-400/UD	500 W	250 mW	3300 W	DIN 7-16	6HE
	ATSC	DF-100/UD	200 W	2.5 W	1100 W	N	3HE
		DF-200/UD	400 W	5 W	1900 W	DIN 7-16	3HE
		DF-200/UD-L	400 W	250 mW	1950 W	DIN 7-16	3HE
		DF-400/UD	750 W	350 mW	3600 W	DIN 7-16	6HE
	Analog (ATV)	FNL-300/UD	400 W	5 W	1000 W	N	3HE
		FNL-500/UD	800 W	10 W	1700 W	DIN 7-16	3HE
		FNL-500/UD-L	800 W	500 mW	1750 W	DIN 7-16	3HE
		FNL-1000/UD	1500 W	800 mW	3100 W	DIN 7-16	6HE
VHF bIII	DVB-T DVB-T2 ISDB-T/T <sub>β</sub>	DF-100/3D	180 W	1 W	800 W	N	3HE
		DF-300/3D	350 W	2 W	1500 W	DIN 7-16	3HE
		DF-600/3D	700 W	4 W	3000 W	DIN 7-16	6HE
	ATSC	DF-100/3D	230 W	1 W	1000 W	N	3HE
		DF-300/3D	450 W	2.5 W	1800 W	DIN 7-16	3HE
		DF-600/3D	900 W	5 W	3600 W	DIN 7-16	6HE
	Analog (ATV)	FNL-500/3D	500W	2 W	900 W	N	3HE
		FNL-1000/3D	1000 W	4 W	1900 W	DIN 7-16	3HE
		FNL-2000/3D	2000 W	8 W	3500 W	DIN 7-16	6HE