

# VHF DIGITAL SIGNAL BOOSTERS

## 137 - 174 MHz • 1 or 2 or 3 channels

DH124

### Product Features

- Channel Selective, software programmable
- Fully digital signal boosters, FPGA based
- Auto diagnostic
- Uplink squelch, per channel and per time slot
- User adjustable gain control, UL and DL independent, per channel
- Automatic Gain Control, per channel and per time slot
- Weatherproof enclosure, IP67/NEMA4X
- NFPA compliant
- Built in spectrum analyzer



### Applications

- Indoor coverage: tunnels and mobile fast-deploy communication units
- Outdoor coverage: oil rigs, stadiums, dense urban areas, rural areas, cliffs

### Specification

### Value

Specification	Value
Type	Digital Signal Boosters (without Antenna Feedback Cancellation)
Frequency range	137 - 174 MHz
Downlink BW	25KHz
Uplink BW	25KHz
UL to DL bandguard	100KHz
Passband BW. min	25KHz
Number of Passband	1 or 2 or 3
Gain, maximum	80 dB
Passband ripple	+/- 2.0 dB
Gain, manual control	28dB range, digitally controlled in 1dB steps
Antenna isolation	Max Gain + 15 dB
Composite output power, DL	1 channel: +13 dBm; 2 or 3 channels: +10dBm
Composite output power, UL	1 channel: +13 dBm; 2 or 3 channels: +10dBm
IM and spurious generation	< -13 dBm
Noise figure	9.0 dB max at maximum gain
RF Input/Output impedance	50 Ω
Connectors	N(f) as standard
Uplink squelch function	Yes, user selectable, to avoid UL noise when no carriers present, by time slot and by channel (Channel Selective model only)
Self diagnostic platform	Microprocessor based
Alarms	Yes, amplifiers status, power amplifiers status, power supply failure, battery backup failure, temperature, AGC, RF overload, poor antenna isolation.
Local management and supervising	Local access via USB and Ethernet (web browser)
Remote management and supervising	Remote access via Ethernet. Wireless modem, SNMP as optional.
RoHS compliance	Yes

DOC BD322.01 • 13082018 • FS  
 Fiplex is a registered trademark of Fiplex Communications, Inc.  
 Fiplex Communications, Inc. reserves the right to change specifications without prior notice.

# VHF DIGITAL SIGNAL BOOSTERS

## 137 - 174 MHz • 1 or 2 or 3 channels

**DH124**

Specification	Value
AC Supply	110VAC, 50/60 Hz
Power Consumption	1 channel: 200W 2 channels: 230W 3 channels: 260W
DC Supply	+24VDC & -48VDC
Housing	IP67 / NEMA4X
Temperature range	-13° to 131° F • -25° to +55° C
Cooling	Natural convection
Dimension	30 X 24 X 12 inches • 762 X 610 X 305 mm
Mounting	Wall mounting
MTBF	<50.000 hours

MODEL	NFPA	POWER in dBm	110-220VAC	24VDC & -48VDC
DH124-307	X	13	X	
DH124-308	X	13		X
DH124-310	X	10	X	
DH124-311	X	10		X
DH124-316	X	10	X	
DH124-317	X	10		X