

UHF DIGITAL SIGNAL BOOSTERS

453-454 / 458-459 & 460-462 / 465-467 MHz • Class A

DH424

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



Digital Signal Boosters



Applications

- For P25, TETRA, DMR, NXDN and Conventional systems
- Indoor coverage: tunnels and mobile fast-deploy communication units
- Outdoor coverage: oil rigs, stadiums, dense urban areas, rural areas, cliffs

Specification

Value

Type	Digital Signal Boosters
Frequency range	453 - 454 / 458 - 459 & 460 - 462 / 465 - 467 MHz
Passband BW. min	Channel Selective (90KHz, 45KHz, 30KHz, 20KHz, and 15KHz BW)
Number of Passband	Channel Selective (90KHz, 45KHz, 30KHz, 20KHz, and 15KHz BW), 1 to 32
Gain, maximum	70dB
Passband ripple	+/- 2.0 dB
Gain, manual control	28dB range, digitally controlled in 1dB steps
Composite output power, DL	+24dBm
Composite output power, UL	+24dBm
IMD and Spurs	<-13dBm
Noise figure	9.0dB max at maximum gain
RF Input/Output impedance	50 Ω
Group delay	Channel Selective 90KHz, 14μS Channel Selective 45KHz, 23μS Channel Selective 30KHz, 32μS Channel Selective 20KHz, 45μS Channel Selective 15KHz, 55μS
Maximum input power, no damage	0dBm (UL) -35dBm (DL)
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)

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Specifications	Value
Self diagnostic platform	Microprocessor based
Alarms	Yes, amplifiers status, power amplifiers status, power supply failure, temperature, AGC, RF overload.
Local management and supervising	Local access via USB and Ethernet (Web Browser)
Remote management and supervising	Remote access via Ethernet.
RoHS compliance	Yes
Power Supply	+24VDC & -48VDC
Power Consumption	120W
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	RC-G	110-220VAC	+24VDC & -48VDC
DH424-303	X		X	
DH424-304	X			X