

UHF DIGITAL SIGNAL BOOSTERS DUAL SUB BAND

450 - 512 MHz • Class A

DH424-D
DH430-D
DH437-D

Product Features

- UHF Dual Sub Band
- 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 Dual Sub Band
Frequency range	450 - 512 MHz
Passband BW. min	Channel Selective (90KHz, 45KHz, 30KHz 20KHz and 15 KHz BW)
Number of Passband	Channel Selective (90KHz, 45KHz, 30KHz, 20KHz and 15KHz BW) 1 to 12 per subband
Gain, maximum	80dB
Passband ripple	+/- 3dB
Gain, manual control	28dB range, digitally controlled in 1dB steps
Composite output power, DL	DH42-D4: +24dBm (2MHz BW) & +21dBm (700KHz BW) DH430-D: +30dBm DH437-D: +37dBm
Composite output power, UL	+24dBm (2MHz BW) & +21dBm (700KHz BW)
IM and spurious generation	< -13dBm
Noise figure	9dB at maximum gain
Impedance	50 Ω
Group delay	Channel Selective 90KHz, 14uS Channel Selective 45KHz, 23uS Channel Selective 30KHz, 32uS Channel Selective 20KHz, 45 uS Channel Selective 15KHz, 55 uS
Maximum input power, no damage	0dBm (UL) -20dBm (DL)
Connectors	N(f) as standard
VSWR at operating frequencies	1.5:1 max
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

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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. Wireless MODEM (SNMP) as optional (RC-G)		
RoHS compliance	Yes		
AC Supply	110/220 VAC, 50/60 Hz		
Power Consumption	DH424-D: 160W	DH430-D: 200W	DH437-D: 240W
DC Supply	Optional, see table		
Housing	IP67 / NEMA4X		
Temperature range	-13° to 131° F • -25° to +55° C		
Cooling	Natural convection		
Dimension	20.2 x 18.2 x 9 inches • 514 x 462 x 230 mm		
Weight	55 lbs • 25 kg		
Mounting	Wall mounting		
MTBF	>50.000 hours		

MODELO	NFPA	RC-G	110-220 VAC	+24VDC	-48VDC	4 PORTS	[CLK 160] 405-430 450-475 485-512	[CLK 150] 380-410 470-485
DH424-D-004	X		X			X	X	
DH424-D-005	X			X		X	X	
DH424-D-006	X				X	X	X	
DH424-D-010	X	X	X			X	X	
DH424-D-011	X	X		X		X	X	
DH424-D-012	X	X			X	X	X	
DH424-D-016	X		X			X		X
DH424-D-017	X			X		X		X
DH424-D-018	X				X	X		X
DH424-D-022	X	X	X			X		X
DH424-D-023	X	X		X		X		X
DH424-D-024	X	X			X	X		X

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MODELO	NFPA	RC-G	110-220 VAC	+24VDC	-48VDC	4 PORTS	[CLK 160] 405-430 450-475 485-512	[CLK 150] 380-410 470-485
DH430-D-004	X		X			X	X	
DH430-D-005	X			X		X	X	
DH430-D-006	X				X	X	X	
DH430-D-010	X	X	X			X	X	
DH430-D-011	X	X		X		X	X	
DH430-D-012	X	X			X	X	X	
DH430-D-016	X		X			X		X
DH430-D-017	X			X		X		X
DH430-D-018	X				X	X		X
DH430-D-022	X	X	X			X		X
DH430-D-023	X	X		X		X		X
DH430-D-024	X	X			X	X		X

MODELO	NFPA	RC-G	110-220 VAC	+24VDC	-48VDC	4 PORTS	[CLK 160] 405-430 450-475 485-512	[CLK 150] 380-410 470-485
DH437-D-004	X		X			X	X	
DH437-D-005	X			X		X	X	
DH437-D-006	X				X	X	X	
DH437-D-010	X	X	X			X	X	
DH437-D-011	X	X		X		X	X	
DH437-D-012	X	X			X	X	X	
DH437-D-016	X		X			X		X
DH437-D-017	X			X		X		X
DH437-D-018	X				X	X		X
DH437-D-022	X	X	X			X		X
DH437-D-023	X	X		X		X		X
DH437-D-024	X	X			X	X		X