

# TETRA AND TETRAPOL UHF ECHO CANCELLATION DIGITAL SIGNAL BOOSTERS

**DH336F**

## Product Features

- Echo cancellation, reduces antenna to antenna isolation requirements
- Compatible with TETRA and TETRAPOL
- Fully digital signal boosters, FPGA based
- Auto diagnostic
- Uplink squelch, per channel and per time slot
- Antenna feedback cancellation
- User adjustable gain control, UL and DL independent, per channel
- Automatic Gain Control, per channel and per time slot
- Weatherproof enclosure, IP67/NEMA4X
- Built in spectrum analyzer



Digital Signal Boosters  
with Echo Cancellation

## Applications

- Mobile fast-deploy communication units
- Outdoor coverage: oil rigs, stadiums, dense urban areas, rural areas, cliffs



## Specification

## Value

Specification	Value
Type	Echo Cancellation Signal Boosters
Frequency range	See table
Passband BW. min	Channel Selective (90KHz, 45KHz, 30KHz and 12,5 KHz BW)
Number of Passband	Channel Selective (90KHz, 45KHz, 30KHz and 12,5 KHz BW), 1 to 8
Downlink to Uplink separation, min	10 MHz, factory adjustable
Gain, maximum	80dB
Passband ripple	+/- 2.0 dB
Gain, manual control	20dB range, digitally controlled in 1dB steps
Antenna isolation	Max Gain - 20dB
Composite output power, DL	+36dBm composite
Composite output power, UL	+18dBm composite
IM and spurious generation	< -36dBm
Noise figure	6.0dB max at maximum gain
Impedance	50 Ω
Group delay	Channel Selective 90KHz, <14μS Channel Selective 45KHz, <23μS Channel Selective 30KHz, <32μS Channel Selective 12,5 KHz, <55μS
Maximum input power, no damage	0dBm (UL) -20dBm (DL)
Connectors	N(f) as standard
VSWR at operating frequencies	1.5:1 max

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Specification	Value
Uplink squelch function	Yes, user selectable, to avoid UL noise when no carriers present, by time slot and by channel
Self diagnostic platform	Microprocessor based
Alarms	Yes, amplifiers status, power amplifiers status, power supply failure, temperature, AGC, RF overload, door open.
Local management and supervising	Local access via USB and Ethernet
Remote management and supervising	Remote access via Ethernet (SNMP or WEB browser) or wireless modem, option RC-G (FOMS)
RoHS compliance	Yes
AC Supply	110/220 VAC, 50/60 Hz.
Power consumption	<120W
DC Supply	See table
Complies with	EN 301 489-18; ETSI TS 101 789-1, EN 60 950
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	40 lbs • 18 kg
Mounting	Wall or pole mounting
MTBF	50.000 hours

MODEL	NFPA	RC-G	AC	24VDC	-48VDC	[CLCK 160] 405-430 450-470 485-512	[CLCK 150] 380-410 465-485	UHF BW5-SPL10	DUPX Ceramics UL=385-390/ DL=395-400	DUPX Ceramics UL=380-385/ DL=390-395	DUPX Ceramics UL=410-415/ DL=420-425
DH336F-001			X			X					X
DH336F-003				X		X					X
DH336F-009					X	X					X
DH336F-010	X		X			X					X
DH336F-011	X			X		X					X
DH336F-012	X				X	X					X
DH336F-005		X	X			X					X
DH336F-007		X		X		X					X
DH336F-013		X			X	X					X
DH336F-014	X	X	X			X					X
DH336F-015	X	X		X		X					X
DH336F-016	X	X			X	X					X
DH336F-002			X				X			X	
DH336F-004				X			X			X	
DH336F-017					X		X			X	
DH336F-018	X		X				X			X	
DH336F-019	X			X			X			X	
DH336F-020	X				X		X			X	

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DH336F-006		X	X				X			X		
DH336F-008		X		X			X			X		
DH336F-021		X			X		X			X		
DH336F-022	X	X	X				X			X		
DH336F-023	X	X		X			X			X		
DH336F-024	X	X			X		X			X		
DH336F-025			X			X		X				
DH336F-026				X		X		X				
DH336F-027					X	X		X				
DH336F-028	X		X			X		X				
DH336F-029	X			X		X		X				
DH336F-030	X				X	X		X				
DH336F-031		X	X			X		X				
DH336F-032		X		X		X		X				
DH336F-033		X			X	X		X				
DH336F-034	X	X	X			X		X				
DH336F-035	X	X		X		X		X				
DH336F-036	X	X			X	X		X				
DH336F-037			X				X		X			
DH336F-038				X			X		X			
DH336F-039					X		X		X			
DH336F-040	X		X				X		X			
DH336F-041	X			X			X		X			
DH336F-042	X				X		X		X			
DH336F-043		X	X				X		X			
DH336F-044		X		X			X		X			
DH336F-045		X			X		X		X			
DH336F-046	X	X	X				X		X			
DH336F-047	X	X		X			X		X			
DH336F-048	X	X			X		X		X			
DH336F-049			X			X					X	
DH336F-050				X		X					X	
DH336F-051					X	X					X	
DH336F-052	X		X			X					X	
DH336F-053	X			X		X					X	

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DH336F-054	X				X	X					X	
DH336F-055		X	X			X					X	
DH336F-056		X		X		X					X	
DH336F-057		X			X	X					X	
DH336F-058	X	X	X			X					X	
DH336F-059	X	X		X		X					X	
DH336F-060	X	X			X	X					X	
DH336F-061			X			X						X
DH336F-062				X		X						X
DH336F-063					X	X						X
DH336F-064	X		X			X						X
DH336F-065	X			X		X						X
DH336F-066	X				X	X						X
DH336F-067		X	X			X						X
DH336F-068		X		X		X						X
DH336F-069		X			X	X						X
DH336F-070	X	X	X			X						X
DH336F-071	X	X		X		X						X
DH336F-072	X	X			X	X						X

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