



Class A UHF (450-512 MHz) Public Safety Signal Boosters

General Information

Westell's digital Class A Signal Boosters supports UHF Spectrum for improving the quality of critical communications for first responders, and private mobile users. Westell's Class A Signal Boosters are UL Listed and can handle a larger coverage area because of their higher power.

Westell's Class A Signal Boosters supports 32 channels (uplink and downlink), near/far mitigation, an integrated spectrum analyzer, and is compliant with NFPA code.

Frequency Ranges

- 450-512 MHz

Product Highlights

- Digital Class A
- Channel Selective
- 30 dBm (1 Watt) or 37 dBm (5 Watts)
- Supports up to 32 Channels (Uplink and Downlink)
- NFPA 1221 & 72 (2016) compliant
- IP67/NEMA 4X enclosure
- Uplink and Downlink squelch, per channel
- UL Listed
- Independent power and gain control per channel
- 80 dB Gain
- Integrated spectrum analyzer
- Dry Contacts for fire panel connection
- Supports SNMP
- Web-Based GUI

Supported Alarms

- Power Amplifier Status
- Power Supply Failure
- AGC
- Temperature
- RF Overdrive
- Isolation / Oscillation
- Antenna Failure



CS33-46A- 2NA - Pictured

Electrical Specifications

Downlink Output Power	30 dBm (1 Watt) or 37 dBm (5 Watt)
Uplink Output Power	24 dBm (1/4 Watt)
Channels Supported	Up to 32 Uplink Up to 32 Downlink
Gain	80 dB
Gain Adjustment Range	20dB plus 40dB individually per filter
Passband	Channel Selective (90 KHz, 60 KHz, 45 KHz, 30 KHz, 20 KHz, and 15 KHz)
IMD	<-13 dBm
Noise Figure	< 9.0 dB Max @ max gain
Delay	90 KHz, 15µs 60 KHz, 19µs 45 KHz, 24µs 30 KHz, 32µs 20 KHz, 45µs 15 KHz, 55µs
Input Power (w/o Damage)	0 dBm Uplink (Max) -20 dBm Downlink (Max)
Commercial Power Requirements	AC (110/220 VAC) or DC (+24VDC to -48VDC)
Power Consumption	1 W AC 150 W typ, 200 W max 1 W DC 140 W typ, 150 W max 5 W AC 170 W typ, 220 W max 5 W DC 160 W typ, 170 W max



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Mechanical Specifications

Dimensions (HxWxD), Chassis B	20.2 x 18.2 x 9 inches
Dimensions (HxWxD), Chassis C	30 x 24 x 12 inches
Weight, Chassis B	55 lbs.
Weight, Chassis C	- -
Cooling	Passive
Weatherproofing	IP-67/NEMA 4X

Connectors	
Antenna Ports	N-Type Female
User Interface	Ethernet or USB
Alarm Relay	8-Wire Dry Contact Terminal Block (Max current 500mA)
Operating Temperature	-25° to +50° C
Mounting	Wall, Rack or Pole mounting

Ordering Information | 30 dBm (1W) Output Power:

Frequency Range MHz	Westell Part Number	Description	Chassis
450-470	CS33-46A-2NA	Class A, 2MHz BW/5MHz Split, 80 dB gain, 1W, AC Power	B
	CS33-46A-2ND	Class A, 2MHz BW/5MHz Split, 80 dB gain, 1W, DC Power	B
	CS33-46A-4NA	Class A, 4MHz BW/5MHz Split, 80 dB gain, 1W, AC Power	C
	CS33-46A-4ND	Class A, 4MHz BW/5MHz Split, 80 dB gain, 1W, DC Power	C
	CS33-46A-0NA	Class A, No Duplexer*, 80 dB gain, 1W, AC Power	B
	CS33-46A-0ND	Class A, No Duplexer*, 80 dB gain, 1W, DC Power	B
	CS33-46A-D2NA	Class A, Dual Sub-band 2 MHz BW/5 MHz Split, 80 dB gain, 1W, AC Power	C
	CS33-46A-D2ND	Class A, Dual Sub-band 2 MHz BW/5 MHz Split, 80 dB gain, 1W, DC Power	C
470-488	CS33-46T-1NA	Class A, 0.7MHz BW/3MHz Split, 80 dB gain, 1W, AC Power	B
	CS33-46T-1ND	Class A, 0.7MHz BW/3MHz Split, 80 dB gain, 1W, DC Power	B
	CS33-46T-0NA	Class A, No Duplexer*, 80 dB gain, 1W, AC Power	B
	CS33-46T-0ND	Class A, No Duplexer*, 80 dB gain, 1W, DC Power	B
	CS33-46T-D1NA	Class A, Dual Sub-band 0.7MHz BW/3 MHz Split, 80 dB gain, 1W, AC Power	C
	CS33-46T-D1ND	Class A, Dual Sub-band 0.7MHz BW/3 MHz Split, 80 dB gain, 1W, DC Power	C
480-500	CS33-46D-D1NA	Class A, Dual Sub-band 0.7MHz BW/3 MHz Split, 80 dB gain, 1W, AC Power	C
	CS33-46D-D1ND	Class A, Dual Sub-band 0.7MHz BW/3 MHz Split, 80 dB gain, 1W, AC Power	C
490-512	CS33-46D-1NA	Class A, 0.7 MHz BW/3MHz Split, 80 dB gain, 1W, AC Power	B
	CS33-46D-1ND	Class A, 0.7 MHz BW/3MHz Split, 80 dB gain, 1W, DC Power	B
	CS33-46D-0NA	Class A, No Duplexer*, 80 dB gain, 1W, AC Power	B
	CS33-46D-0ND	Class A, No Duplexer*, 80 dB gain, 1W, DC Power	B
453-454/458-459 & 460-462/465-467	CS33-46E-DSNA	Class A, Dual Sub-band (Miami Dade FD), 80 dB gain, 1W, AC Power	C
	CS33-46E-DSND	Class A, Dual Sub-band (Miami Dade FD), 80 dB gain, 1W, DC Power	C

*Please, contact Westell for Special Order Filter Configurations



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Ordering Information | 37 dBm (5W) Output Power:

Frequency Range MHz	Westell Part Number	Description	Chassis
450-470	CS33-49A-2NA	Class A, 2MHz BW/5MHz Split, 80 dB gain, 5W, AC Power	B
	CS33-49A-2ND	Class A, 2MHz BW/5MHz Split, 80 dB gain, 5W, DC Power	B
	CS33-49A-4NA	Class A, 4MHz BW/5MHz Split, 80 dB gain, 5W, AC Power	C
	CS33-49A-4ND	Class A, 4MHz BW/5MHz Split, 80 dB gain, 5W, DC Power	C
	CS33-49A-0NA	Class A, No Duplexer*, 80 dB gain, 5W, AC Power	B
	CS33-49A-0ND	Class A, No Duplexer*, 80 dB gain, 5W, DC Power	B
	CS33-49A-D2NA	Class A, Dual Sub-band 2 MHz BW/5MHz Split, 80 dB gain, 5W, AC Power	C
	CS33-49A-D2ND	Class A, Dual Sub-band 2 MHz BW/5MHz Split, 80 dB gain, 5W, DC Power	C
	CS33-49A-D4NA	Class A, Dual Sub-band 1Mhz BW band A & 4 MHz BW band B/5 MHz Split, 80 dB gain, 5W, AC Power	C
	CS33-49A-D4ND	Class A, Dual Sub-band 1Mhz BW band A & 4 MHz BW band B/5 MHz Split, 80 dB gain, 5W, DC Power	C
470-488	CS33-49T-1NA	Class A, 0.7MHz BW/3MHz Split, 80 dB gain, 5W, AC Power	B
	CS33-49T-1ND	Class A, 0.7MHz BW/3MHz Split, 80 dB gain, 5W, DC Power	B
	CS33-49T-0NA	Class A, No Duplexer*, 80 dB gain, 5W, AC Power	B
	CS33-49T-0ND	Class A, No Duplexer*, 80 dB gain, 5W, DC Power	B
	CS33-49T-D1NA	Class A, Dual Sub-band 0.7MHz BW/3MHz Split, 80 dB gain, 5W, AC Power	C
	CS33-49T-D1ND	Class A, Dual Sub-band 0.7MHz BW/3MHz Split, 80 dB gain, 5W, DC Power	C
490-512	CS33-49D-1NA	Class A, 0.7MHz BW/3MHz Split, 80 dB gain, 5W, AC Power	B
	CS33-49D-1ND	Class A, 0.7MHz BW/3MHz Split, 80 dB gain, 5W, DC Power	B
	CS33-49D-0NA	Class A, No Duplexer*, 80 dB gain, 5W, AC Power	B
	CS33-49D-0ND	Class A, No Duplexer*, 80 dB gain, 5W, DC Power	B
	CS33-49D-D1NA	Class A, Dual Sub-band 0.7MHz BW/3MHz Split, 80 dB gain, 5W, AC Power	C
	CS33-49D-D1ND	Class A, Dual Sub-band 0.7MHz BW/3MHz Split, 80 dB gain, 5W, DC Power	C
453-454/458-459 & 460-462/465-467	CS33-49E-DSNA	Class A, Dual Sub-band (Miami Dade FD), 80 dB gain, 5W, AC Power	C
	CS33-49E-DSND	Class A, Dual Sub-band (Miami Dade FD), 80 dB gain, 5W, DC Power	C

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Chassis B



Chassis C

