Westell® | ProtectLink™ Fiber DAS

UL2524 & NFPA Public Safety Fiber DAS

General Information

The Westell ProtectLink Public Safety Fiber DAS represents the next revolution in Public Safety DAS design, offering the most flexible platform available on the market. This innovative design allows a true pay-as-you-grow solution. Adding an Optical Main to one of our ProtectLink BDAs provides expansion of up to eight 2.5 watt remote units for covering additional buildings or spaces while supporting the local service antennas from the main BDA. This design reduces the number of remotes required when compared with other platforms.
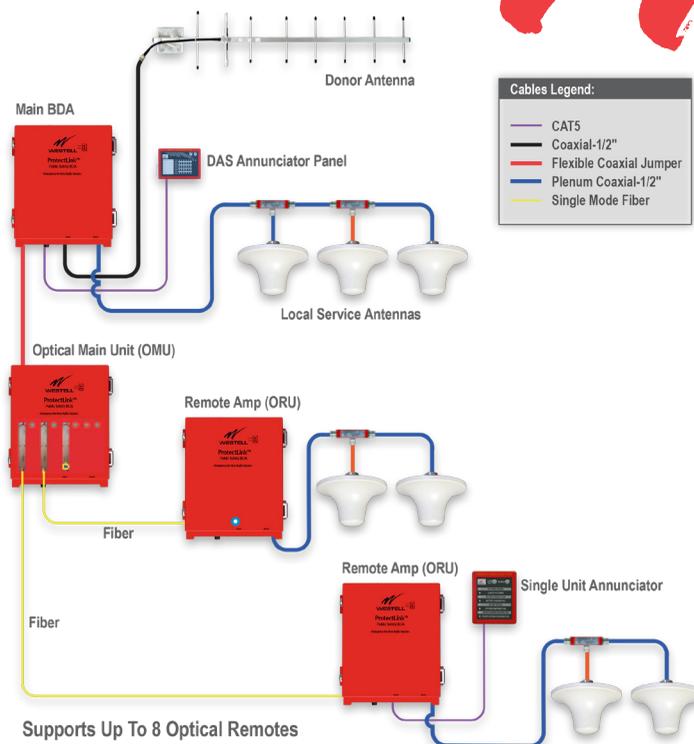
"Intelligence Built-In" has been a hallmark of Westell products, and nowhere else is that more evident than with ProtectLink DAS. With auto-discovery of new remotes, auto firmware upgrade across the entire network, auto compensation for fiber loss, we've made this product the easiest to install, most reliable PS fiber DAS available. And with a full 90dB of end-to-end gain and 2.5 Watts per band per remote, it's sure to support a wide range of applications and building types.

Frequency Range

- Uplink: 788-806 / 806-824 MHz
- Downlink: 758-776 / 851-869 MHz

Product Highlights

- Expandable to support from 1 to 8 remotes
- Intelligent oscillation management and self-healing
- 90 dB system downlink gain, 80dB uplink
- Listed to UL2524, UL62368-1, UL50E Type4
- Built-in battery charging and alarm circuitry
- Built-in annunciator communications link
- EPO (Emergency Power Off)
- Uplink & downlink squelch per filter
- Independent gain control per filter
- Compact footprint
- NEMA4 conduit glands included
- Supports both digital and analog modulation
- Supports P25 phase 1 & 2
- Supports SNMP
- 3-year warranty

Ordering Information

Part Number	Description
CS40-734834-00D-A0	Dual-band 700/800 MHz, 2.5 watt, fiber DAS Class A/B BDA
CS40-OPTMASTER	Optical main chassis, supports up to 8 radio modules
CS40-OPTRADIOMOD	Optical radio module, converts RF to fiber, one per remote
CS40-734834-00D-AR	Dual-band 700/800 MHz, 2.5 watt, Class A/B remote
CS40-734834-00D-BR	Dual-band 700/800 MHz, 2.5 watt wideband remote
CS40-ANNUNC	BDA Remote annunciator, for monitoring a single device
CS40-DASANNUNC	DAS Remote annunciator, for monitoring all DAS units

Product Certification

UL 2524	In-Building 2-Way Emergency Radio Communication Enhancement Systems (ERCES / ERRCS)
UL 62368-1	Audio/Video, Information and Communication Technology Equipment - Part 1: Safety Requirements
UL 508A	Industrial Control Panels (UL50E Type 4)
FCC ID	NVRDPSA81090-78

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Electrical Specifications

Main power input	110 VAC (88-264VAC)
AC power consumption	210W max. (1.9Amps @ 110VAC)
Battery charger output	28 VDC
DC input range	24 - 30 VDC
DC power consumption (dual-band)	130 watts (5.3 Amps)
DC power consumption (single-band)	90 watts (3.7 Amps)
DL output power	34dBm (2.5W)
UL output power	27dBm, ½ watt
DL gain	90dB +/- 3dB
UL gain	80dB
Noise figure @ max gain	<7dB (with one remote)
AGC dynamic range	60dB
Gain adjustment range	30dB
Filter gain adjustment	30dB
Squelch adjustment range	-60 to -90dBm
VSWR	<1.5:1
Number of filters class A system	32 per band
Number offilters class B system	4 per band
Class A BDA filter bandwidths	12.5KHz, 25KHz, 50KHz, 75KHz, 100KHz, 150KHz
Class B BDA filter bandwidths	250KHz, 500KHz, 1MHz, 2MHz, 3MHz, 7MHz, 10MHz, 18MHz
MTBF	161,000 hours (18.3 years)

Optical Specifications

Optical connector	SC/APC
Optical link budget	8dB
Fiber type	Single-mode
Fiber count	One

BDA & Remote Mechanical Specifications

Dimensions (H x W x D)	18.6 x 14.9 x 7.3 in
Approximate weight (lbs)	49.5
Mounting	Wall-mount
Weatherproofing	IP65/NEMA Type 4
Cable feedthroughs	Cordgrips and flex conduit fittings included
Connectors	
Antenna ports	4.3-10 female
User interface: GUI & NMS	RJ45 Jack, web browser based
Alarm connections	Compression screw terminals
Annunciator	RJ45 Jack
AC & DC power	Compression screw terminals
Operating temperature	-30° C - +50° C
Color	Red
UL max input power	+10dBm

OMU Mechanical Specifications

Dimensions (H x W x D)	18.6 x 14.9 x 7.3 in
Approximate weight (lbs)	49.5 lbs.
Mounting	Wall-mount
Weatherproofing	IP65/NEMA Type 4
Cable feedthroughs	Flex conduit fittings included
Power	24VDC, supplied by BDA
RF connectors	SMA female
Operating temperature	-30° C - +50° C
Color	Red

Optical Main Unit (OMU)