Westell® ProtectLinkV2 Fiber DAS HE and RE

UL2524 Public Safety UHF or VHF Fiber DAS

General Information

Westell's ProtectLinkV2 Fiber DAS HE (headend) and RE (remote end) allow for fiber connectivity for UHF and VHF with public safety BDAs (bi-directional amplifier) and ORUs (optical remote unit), and they provide fiber to RF conversion and communication between the headend and remote units.

ProtectLinkV2 Fiber HE can support fiber connectivity for up to four remotes with single mode fiber connecting an existing BDA to the PLV2 HE.

The headend BDA is connected to the PLV2 HE via low level RF coax uplink and downlink feeds. Each HE can be daisy chained via one of the two RS485 ports expanding the remote count for each HE unit for support of additional remotes.
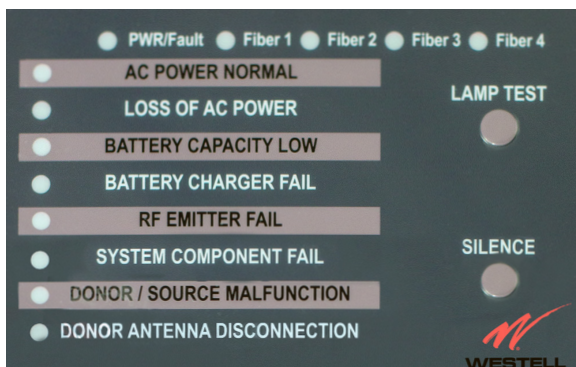
Applications

Enabling UHF/VHF Fiber DAS

ProtectLinkV2 Fiber HE can support fiber connectivity for up to four remotes with single mode fiber connecting an existing BDA to the PLV2 HE.
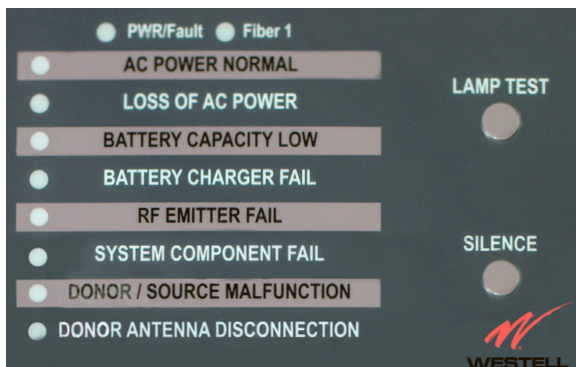
Built in UL2524/NFPA 1225 Annunciator

- Annunciator LED's with lamp test and silence
- AC power normal
- Loss of AC power
- Battery capacity low
- RF emitter fail
- System component fail
- Donor/source malfunction
- Donor antenna disconnection
- Battery charger fail alarm

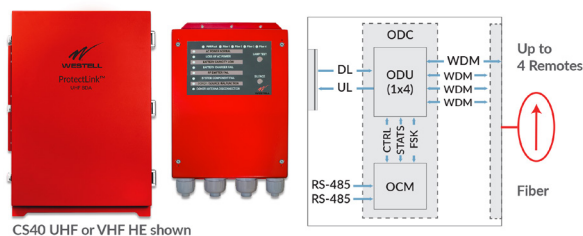**ProtectLinkV2 Fiber-HE Annunciator Panel**

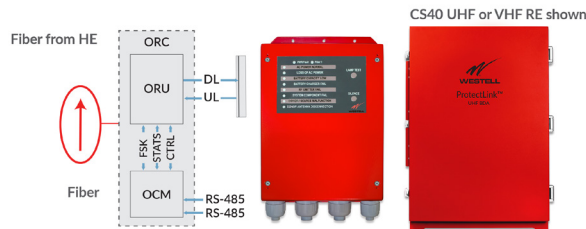**ProtectLinkV2 Fiber-RE Annunciator Panel**

Product Highlights ProtectLinkV2 Fiber HE

- Compatible with Westell CS40 UHF and VHF headend BDAs and remotes
- Supports headend BDA via SMA connector(s) with one uplink and one downlink
- Allows expansion for up to four remotes
- Connects to headend BDA via SMA cables, one uplink and one downlink, 12 or 28 VDC power and RS485 cable
- One single mode fiber connection for each remote
- Automatic level detection
- Bi-directional communication link for alarm aggregation of remotes
- Ability to daisy chain additional ProtectLinkV2 Fiber HE systems to support 8, 12, and 16 remotes via local RS485 and power cables
- Remote auto discovery
- Software upgradeable
- Max distance 5 km for HE to RE
- Status indicator for fiber 1 through 4
- PWR/Fault LED

ProtectLinkV2 Fiber-HE UHF/VHF Functionality

CS40 UHF or VHF HE shown

ProtectLinkV2 Fiber-RE UHF/VHF Functionality

CS40 UHF or VHF RE shown

Westell® ProtectLinkᵥ₂ Fiber DAS HE

UL2524 Public Safety UHF or VHF Fiber DAS

ProtectLinkᵥ₂ HE Electrical Specifications

Main power input	12 to 28 VDC, supplied by BDA
Power consumption	13.2 W
DC input range	12 to 28 VDC
Operating current	1.6 Amps max
Typical DC current	1000 mA (12VDC), 450 mA (28 VDC)
DL output power	0 dBm typical, can be adjusted
UL output power	-40 dBm typical, can be adjusted
Frequency range	100-900MHz
ALC range	15 dBm

ProtectLinkᵥ₂ HE Mechanical Specifications

Dimensions (H x W x D)	11.25" x 8.75" x 2.75", not including glands
Approximate weight (lbs)	9.25
Mounting	Wall-mount
Weatherproofing	IP65/NEMA Type 4
Cable feedthroughs	Cordgrips and flex conduit fittings included
Temperature	-30° C - +50° C
RF connectors	(2) SMA (f) UL/DL ports
Fiber count	4
Power	(2) Pin 12 or 28 VDC
Color	Red
RS485	2

ProtectLinkᵥ₂ HE Optical Specifications

Optical connector	SC/APC
Optical link budget	5 dB0
Fiber type	Single mode

ProtectLinkᵥ₂ Fiber HE

Ordering Information (HE)

Part Number	Description
CS40-PLV2FIBER-HE	ProtectLink fiber headend VHF or UHF
Compatible Headend UHF/VHF BDAs	
CS40-U34-U0D-HE	UHF, 2.5W simplex 4 port, 62MHz wideband, Class A/B headend
CS40-U34-U2D-HE	UHF, 2.5W, 3.5MHz passband, 1.5MHz guardband, Class A/B headend
CS40-U34-U4D-HE	UHF, 2.5W, dual window, 3.5MHz passband 1.5MHz guardband, Class A/B headend
CS40-V27-V1D-HE	VHF, 0.5W, simplex 4 port, 24MHz wideband, Class A/B headend
CS40-V27-V2D-HE	VHF, 0.5W, 3.5M PB 1.5MHz guardband, Class A/B headend

ProtectLinkᵥ₂ HE Product Certification

• UL 2524   • FCC Part 15

Westell® ProtectLinkV2 Fiber DAS RE

UL2524 Public Safety UHF or VHF Fiber DAS

Product Highlights ProtectLinkV2 Fiber RE:

- Compatibility with CS40 UHF and CS40 VHF remotes
- Connects single remote via SMA connector(s) one uplink and one downlink, 12 or 28 VDC and RS485 cable
- One single mode fiber connection back to headend
- Automatic level detection
- Bi-directional communication link for alarm aggregation of remotes
- Remote auto discovery
- Software upgradeable
- Max distance 5 km for HE to RE
- Status indicator for fiber
- PWR/Fault LED

ProtectLinkV2 RE Electrical Specifications

Main power input	12 to 28 VDC, supplied by BDA
Power consumption	6.6 W
DC input range	12 to 28 VDC
Operating current	500 mA (12VDC), 220 mA (28 VDC)
DL output power	0 dBm typical, can be adjusted
UL output power	-40 dBm typical, can be adjusted
Frequency range	100-900MHz
ALC range	15 dBm

ProtectLinkV2 RE Mechanical Specifications

Dimensions (H x W x D)	11.25" x 8.75" x 2.75", not including glands
Approximate weight (lbs)	7.6
Mounting	Wall-mount
Weatherproofing	IP65/NEMA Type 4
Cable feedthroughs	Cordgrips and flex conduit fittings included
Temperature	-30° C - +50° C
RF connectors	(2) SMA (f) UL/DL ports
Power	(3) Pin 12 or 28 VDC
Color	Red
RS485	2

ProtectLinkV2 Fiber RE

Ordering Information (RE)

Part Number	Description
CS40-PLV2FIBER-RE	ProtectLink fiber remote end point
Compatible Remotes for UHF/VHF	
CS40-U34-U0D-AR	UHF, 2.5W simplex 4 port, 62MHz wideband, Class A/B remote
CS40-U34-U2D-AR	UHF, 2.5W, 3.5 MHz passband, 1.5MHz guardband, Class A/B remote
CS40-U34-U4D-AR	UHF, 2.5W, dual window, 3.5MHz passband 1.5MHz guardband, Class A/B remote
CS40-V27-V1D-AR	VHF, 0.5W, simplex 4 port, 24MHz wideband, Class A/B remote
CS40-V27-V2D-AR	VHF, 0.5W, 3.5MHz passband 1.5MHz guardband, Class A/B remote

ProtectLinkV2 RE Optical Specifications

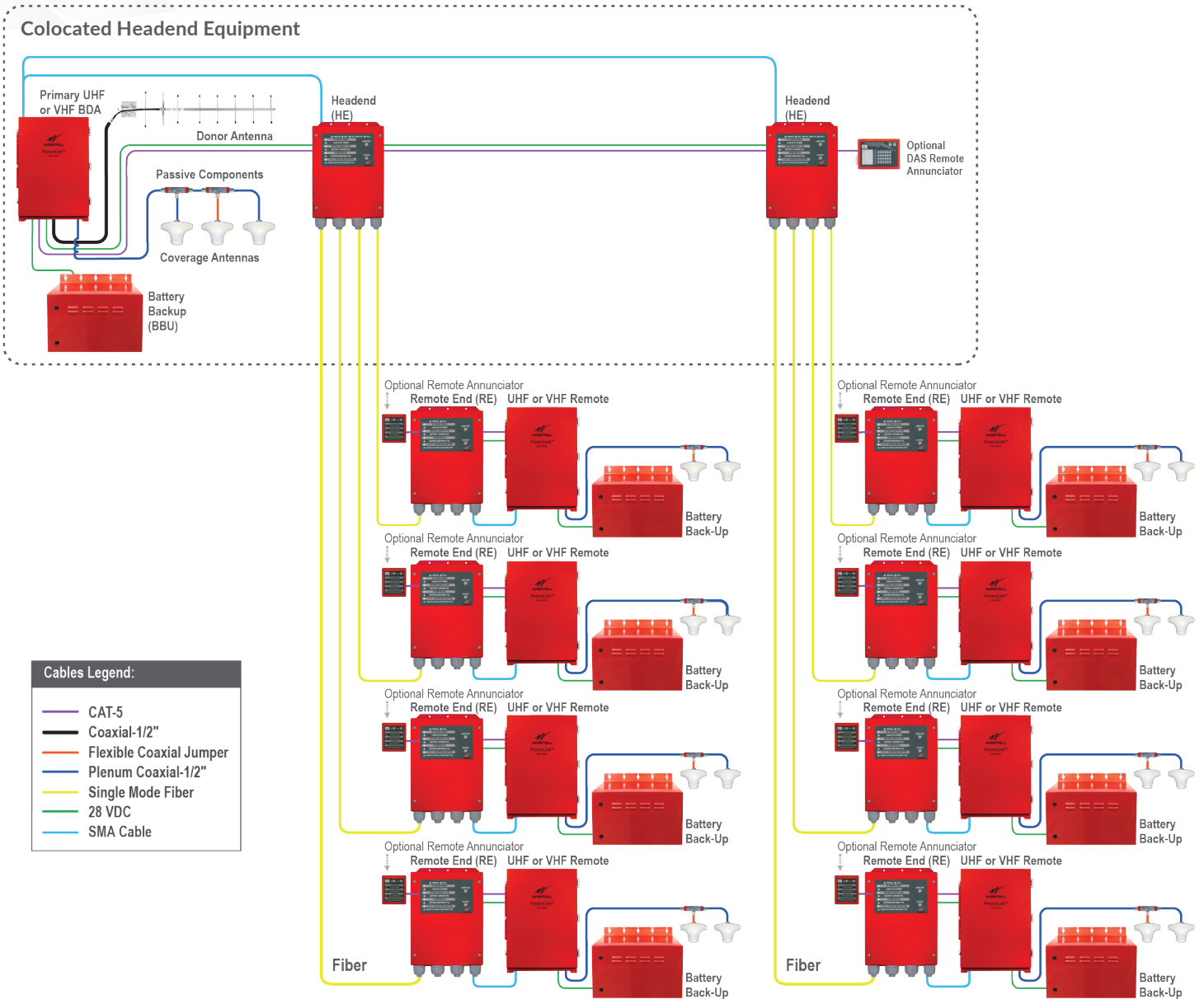| Optical connector	SC/APC
Optical link budget	5 dB0
Fiber type	Single mode
Fiber count	Connectivity for 1 remote

ProtectLinkV2 RE Product Certification

- UL 2524
- FCC Part 15

Westell® ProtectLinkv2 Fiber DAS HE and RE

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8 Remotes Supporting UHF or VHF

Colocated Headend Equipment

Primary UHF or VHF BDA
Donor Antenna
Passive Components
Coverage Antennas
Battery Backup (BBU)
Headend (HE)
Optional DAS Remote Annunciator

Optional Remote Annunciator
Remote End (RE) — UHF or VHF Remote
Battery Back-Up
Fiber

Cables Legend:

CAT-5	
Coaxial-1/2"	
Flexible Coaxial Jumper	
Plenum Coaxial-1/2"	
Single Mode Fiber	
28 VDC	
SMA Cable	

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