

# VCS-20A

NETWORK TESTING – OPTICAL

## DISCONTINUED PRODUCT



### Combines four convenient tools in a single test set

- Four instruments in one
- 50 dB dynamic range
- Clear digital voice transmission
- Hands-free operation
- Three-way powering
- Multiparty option
- Rugged casing

### Flexibility

The VCS-20A brings together four convenient tools in a single test set, combining a full-duplex digital talk set, a stable light source, a 2 kHz tone generator and a 2 kHz tone detector.

### Efficient applications

The VCS-20A fulfills more than simple communication needs. In fact, the light source is calibrated and is stable in time and temperature. Use continuous wave selection to perform attenuation and insertion loss tests. Why carry an extra source when one VCS-20A does it all?

### Extended dynamic range

Two new configurations have extended the VCS-20A's dynamic range to 50 dB. This wide range makes it possible to use new applications requiring clip-on devices.

### Easy-to-use talk set

This unit is rugged and provides high-quality voice communication over a single fiber. The unit's hands-free operation is convenient and simple: press the Talk button to send or receive a call. As usual, conversations are as clear as if both operators were in the same room.

### Powerful and durable

For hours of flawless operation, the three-way powering function automatically selects the best alternative among the choices of rechargeable NiMH battery, 9 V alkaline backup and AC adapter/charger input. Its rugged waterproof casing and protective holster make the VCS-20A the preferred field-testing instrument in the outside plant industry.

### SPECIFICATIONS <sup>a</sup>

Model	-02BL	-02BL-ER	-03BL	-03BL-ER
Emitter type	laser	laser	laser	laser
Wavelength (nm)	1310 ± 25	1310 ± 25	1550 ± 25	1550 ± 25
Spectral width (typical) (nm)	5	5	5	5
Optimum fiber type (µm)	9/125	9/125	9/125	9/125
Distance range <sup>b</sup> (approximately) (km/mi.)	128/80	142/89	180/112	200/125
Power output (dBm)/dynamic range (dB)				
9/125 µm	-5/45	-5/50	-5/45	-5/50
50/125 µm	-5/30	-5/35	-5/30	-5/35
62.5/125 µm	-5/28	-5/33	-5/28	-5/33
Stability (dB)				
1 hour <sup>c</sup>	± 0.10	± 0.10	± 0.10	± 0.10
8 hours <sup>d</sup>	± 0.20	± 0.20	± 0.25	± 0.25

### GENERAL SPECIFICATIONS

Size (H x W x D)	220 mm x 110 mm x 50 mm (8 3/4 in x 4 1/2 in x 2 in)	
Weight		
unit	0.9 kg	(1 3/4 lb)
shipping	2.5 kg	(5 lb)
Temperature		
operating	-10 °C to 50 °C	(14 °F to 122 °F)
storage	-30 °C to 60 °C	(-22 °F to 140 °F)
Relative humidity	0 % to 95 % non-condensing	
Power	Built-in rechargeable NiMH battery lasts 17 hours from full charge, recharges in 6 hours; 9 V battery backup supply lasts 10 hours. Automatic transfer to disposable batteries when rechargeable battery pack runs low. AC adapter/charger for continuous use.	

#### Standard Accessories

User guide, AC adapter/charger, built-in rechargeable batteries, two 9 V alkaline batteries, carrying case, protective holster, shoulder strap, headset with boom microphone and Certificate of Compliance.

#### Safety

This product complies with 21 CFR 1040.10 and 1040.11, and with IEC 60825-1:2007.

CLASS 1 LASER PRODUCT

#### Notes

- a. All tests performed at 23°C ± 1°/73.4°F ± 4° after 1 minute warm-up period.      c. After 10-minute warm-up period.  
b. 9/125 µm SMF 28 CPC 3 singlemode fiber.      d. After a 20-minute warm-up period.

### ORDERING INFORMATION

## VCS-20A-XX-XX

#### Source

- 02BL = 1310 nm laser singlemode
- 03BL = 1550 nm laser singlemode
- 02BL-ER = Extended range 1310 nm laser singlemode
- 03BL-ER = Extended range 1550 nm laser singlemode

#### Connector

- 58 = FC/APC narrow key
- 89 = FC/UPC
- 90 = ST/UPC
- 91 = SC/UPC
- EI-EUI-28 = UPC/DIN 47256
- EI-EUI-76 = UPC/HMS-10/AG
- EI-EUI-89 = UPC/FC narrow key
- EI-EUI-90 = UPC/ST
- EI-EUI-91 = UPC/SC
- EI-EUI-95 = UPC/E-2000
- EA-EUI-28 = APC/DIN 47256
- EA-EUI-76 = UPC/HMS-10/AG
- EA-EUI-89 = APC/FC narrow key
- EA-EUI-90 = UPC/ST
- EA-EUI-91 = APC/SC7
- EA-EUI-95 = APC/E-20007

Example: VCS-20A-02BL-EI-EUI-89

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