

# 20A

## MULTIFUNCTION FIBER-OPTIC TALK SET

VCS-20A

NETWORK TESTING



- 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. The VCS-20A can be configured for singlemode and multimode applications with LED or laser sources.

### 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.

# Multifunction Fiber-Optic Talk Set

## SPECIFICATIONS<sup>1</sup>

Model	-02C	-02B	-02BL	-02BL-ER	-03BL	-03BL-ER
Emitter type	LED	LED	laser	laser	laser	laser
Wavelength (nm)	1300 ± 30	1310 ± 30	1310 ± 25	1310 ± 25	1550 ± 25	1550 ± 25
Spectral width (typical) (nm)		80	80	5	5	5 5
Optimum fiber type (µm)	50/125	9/125	9/125	9/125	9/125	9/125
Distance range <sup>2</sup> (approximately) (km/mi.)	55/34 <sup>3</sup>	94/59	128/80	142/89	180/112	200/125
Power output (dBm)/dynamic range (dB)						
	9/125 µm	-32/13	-17/33	-5/45	-5/50	-5/50
	50/125 µm	-17/33	-17/18	-5/30	-5/35	-5/35
	62.5/125 µm	-17/26	-17/16	-5/28	-5/33	-5/33
Stability (dB)	1 hour <sup>4</sup>	± 0.05	± 0.05	± 0.10	± 0.10	± 0.10
	8 hours <sup>5</sup>	± 0.20	± 0.20	± 0.20	± 0.25	± 0.25

## GENERAL SPECIFICATIONS

Size (H x W x D)		22 cm x 11 cm x 5 cm	(8 3/4 in x 4 1/2 in x 2 in)
Weight	unit	0.88 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.

## Notes

- All tests performed at 23°C ± 1°/73.4°F ± 4° after 1 minute warm-up period.
- 9/125 µm SMF 28 CPC 3 singlemode fiber.
- 50/125 µm CPC-3 multimode fiber.
- After a 10-minute warm-up period.
- After a 20-minute warm-up period.
- For multimode sources only.
- For singlemode sources only.

## SAFETY

This product complies with 21 CFR 1040.10 and 1040.11, and with IEC 60825-1:1993+A2:2001.

CLASS 1 LASER PRODUCT

CLASS 1 LED PRODUCT

## ORDERING INFORMATION

### VCS-20A-XX-XX

#### Source

- 02C = 1300 nm LED multimode
- 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

- 50 = FC/PC<sup>6</sup>
- 54 = SC/PC<sup>6</sup>
- 58 = FC/APC narrow key
- 74 = ST/PC<sup>6</sup>
- 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<sup>7</sup>
- EA-EUI-76 = UPC/HMS-10/AG
- EA-EUI-89 = APC/FC narrow key<sup>7</sup>
- EA-EUI-90 = UPC/ST
- EA-EUI-91 = APC/SC<sup>7</sup>
- EA-EUI-95 = APC/E-2000<sup>7</sup>

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

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#### Rugged Handheld Solutions

- OLTS
- Power meter
- Light source
- Talk set



#### Optical Fiber

- OTDR
- OLTS
- ORL meter
- Switch

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- PMD analyzer
- Chromatic dispersion analyzer
- Multiwavelength meter

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- SONET/SDH (DS0 to OC-192c)
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EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices.

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