

MULTIFUNCTION FIBER-OPTIC TALK SET

VCS-20A

NETWORK TESTING – OPTICAL



- 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.

SPECIFICATIONS ^a

Model	-02C	-02BL	-02BL-ER	-03BL	-03BL-ER
Emitter type	LED	laser	laser	laser	laser
Wavelength (nm)	1300 ± 30	1310 ± 25	1310 ± 25	1550 ± 25	1550 ± 25
Spectral width (typical) (nm)	80	5	5	5	5
Optimum fiber type (µm)	50/125	9/125	9/125	9/125	9/125
Distance range ^b (approximately) (km/mi.)	55/34 ^c	128/80	142/89	180/112	200/125
Power output (dBm)/dynamic range (dB)					
9/125 µm	-32/13	-5/45	-5/50	-5/45	-5/50
50/125 µm	-17/33	-5/30	-5/35	-5/30	-5/35
62.5/125 µm	-17/26	-5/28	-5/33	-5/28	-5/33
Stability (dB)					
1 hour ^d	± 0.05	± 0.10	± 0.10	± 0.10	± 0.10
8 hours ^e	± 0.20	± 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	0.88 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.

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

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.

ORDERING INFORMATION

MODULE

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^f
 54 = SC/PC^f
 58 = FC/APC narrow key
 74 = ST/PC^f
 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^g
 EA-EUI-76 = UPC/HMS-10/AG
 EA-EUI-89 = APC/FC narrow key^g
 EA-EUI-90 = UPC/ST
 EA-EUI-91 = APC/SC7
 EA-EUI-95 = APC/E-20007

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

Find out more about EXFO's extensive line of high-performance portable instruments by visiting our website at www.EXFO.com.

EXFO Corporate Headquarters > 400 Godin Avenue, Quebec City (Quebec) G1M 2K2 CANADA | Tel.: 1 418 683-0211 | Fax: 1 418 683-2170 | info@EXFO.com

Toll-free: 1 800 663-3936 (USA and Canada) | www.EXFO.com

EXFO America	3701 Plano Parkway, Suite 160 Plano, TX 75075 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
EXFO Europe	Omega Enterprise Park, Electron Way Chandlers Ford, Hampshire S053 4SE ENGLAND	Tel.: +44 2380 246810	Fax: +44 2380 246801
EXFO Asia	151 Chin Swee Road, #03-29 Manhattan House No.88 Fuhua, First Road	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	Central Tower, Room 801, Futian District Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Shenzhen 518048, CHINA Beijing 100044 P. R. CHINA	Tel.: +86 (755) 8203 2300 Tel.: +86 (10) 6849 2738
		Fax: +86 (755) 8203 2306	Fax: +86 (10) 6849 2662

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. All of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. 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. Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.

For the most recent version of this spec sheet, please go to the EXFO website at <http://www.EXFO.com/specs>

In case of discrepancy the Web version takes precedence over any printed literature.