

High Performance Optical Talk Set Comparison

Specification	Meaning	KI 025BS	Photom 450 XL	EXFO VCS-20A-03BL-ER	NOYES FTS 2-1550
Distance range: 1310 nm fiber ¹ 1550 nm fiber ²	Big is better	167 km 200 km	150 km 120 km	167 km 200 km	150 km 180 km
Wavelength		1550 nm	1310 / 1550 nm, WDM	1550 nm	1550 nm
Dynamic range	Big is better	50 dB	60 dB	50 dB. Specifications @ 23°C only	45 dB
Communication system, single fiber		Full duplex analog	Full duplex analog WDM	Full duplex digital	Full duplex digital
Hands-free speakerphone	Yes is better	Yes	No	No	No
Hands-free Headset		Yes	Yes	Yes	Yes
Min quantity of Talk Set required per mobile unit ³	Less is cheaper	1	2	1	1
Initial connection success rate ⁴	More is better	100 %	50 %	100 %	100 %
Optional Clamp-on coupler		Yes	Yes	Yes	Yes
Min. multi-party units required	Less is cheaper	3 units	4 units	4 units	4 units
Min optical segments for multi-party operation	Less is more flexible	1	2	2	2
2 KHz source	Yes is better	Yes	Yes	Yes	No
2 KHz detection	Yes is better	Yes	Yes	Yes	No
Standard optical connector		Specify one: SC, FC, ST, LSA, E2000, LC, MU,	Interchangeable SC, FC, ST, LSA	Specify one: FC, ST, LSA, SC, E2000,	Specify one: FC, SC, ST
Optical connector protection	Yes is better	Yes	No	No	No
Power		Internal NiCad batteries, AC adaptor, alkaline battery	Alkaline batteries, AC adaptor	Internal NiMH batteries, AC adaptor	Alkaline batteries, AC adaptor
Battery life	Big is better	20 hrs	15 hrs	17 hrs	Unspecified
Dimensions / weight		19 x 12 x 9.5 cm / 1.1 kg	6.5 x 17.5 x 3.5 cm / 0.3 kg	22 x 11 x 5 cm / 0.88 kg	18.4 x 11.1 x 4.6 cm / 0.52 kg
Operation temperature		-5 to 55 °C	Unspecified	-10 to 50 °C	0 to 50 °C
Storage temperature		-40 to 75 °C	Unspecified	-30 to 60 °C	-20 to 50 °C
Standard accessories		Manual, AC adaptor, rugged case, headset, carry strap, connector	Manual, headset, carrying case, SC connector.	Manual, AC adaptor, carrying case, holster, carry strap, headset, connector	Manual, carry case, headset, holster, connector
Warranty		3 – 7 years	1 year?	1 year	?

Disclaimer: This comparison is based on our interpretation of published specifications. No liability is accepted for any inaccuracy. We would be pleased to amend anything found to be inaccurate.

Notes

1. Typical 1310 nm optimised singlemode fiber, 0.4 dB/km at 1310 nm, 0.3 dB/km at 1550nm.
2. Typical 1550 nm optimised singlemode fiber, 0.5 dB/km at 1310 nm, 0.25 dB/km at 1550nm.
3. This is the minimum number of talk sets required to be carried by each work group, to be able to talk to any other workgroup. In the case of A/B type units (like Photom), both types must be carried by each work group unless prior arrangements are made.
4. Following note 3: if two 'A' or two 'B' units happen to get connected, they won't work!