

RUGGED FIBER/COPPER KVM EXTENDERS

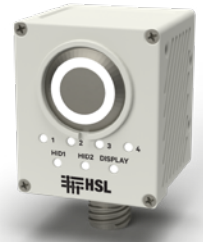


FKCE11PH60-NTR

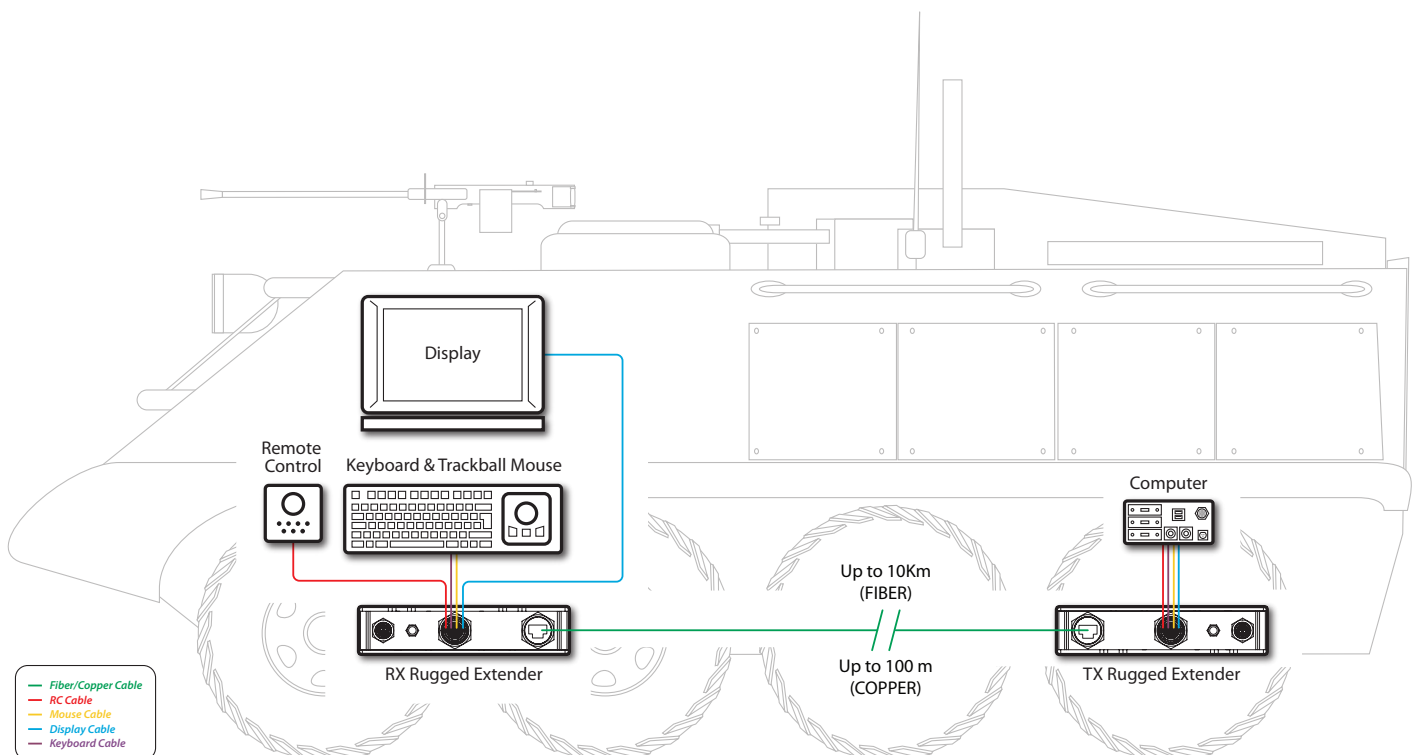
HSL's rugged, TEMPEST compliant, MIL-SPEC extenders facilitate installations where operators, computer sources and KVM switching products are distanced from each other.

The rugged extenders, available in copper or fiber versions, extend keyboard, mouse/trackball, touchscreen commands, 4K video, analog audio, USB and RS232 remote control signals across up to 100m over copper, and up to 10Km over fiber.

HSL's family of rugged remote controls, or any compatible RS-232 controller, can be used together with the rugged extenders to control a rugged KVM switch product distanced from the operator.



Rugged Remote



SPECIFICATION

MODEL	FKCE11PH60-NTR	FKFE11PH60-NTR
MAIN FEATURES		
Dimensions	216.9 W x 215 D x 43.6 H mm (8.54 x 8.46 x 1.71 inch)	
Extension Type	Copper	Fiber
Link Port	RJ45	Data speed: 10 Gbps Wavelength: 850nm
RECEIVER UNIT (RX)		
Display	1xHDMI signals	1xHDMI signals
Max Output Resolution	Up to UHD 4K resolutions 3840x2160 @ 60 Hz	Up to UHD 4K resolutions 3840x2160 @ 60 Hz
USB	2 x HID USB 1 x USB 2.0	2 x HID USB 1 x USB 2.0
Analog Audio	Supported	Supported
RS232	Supported	Supported
TRANSMITTER UNIT (TX)		
Displays	1 x HDMI/DP signals	1 x HDMI/DP signals
Max Output Resolution	Up to UHD 4K resolutions 3840x2160 @ 60 Hz	Up to UHD 4K resolutions 3840x2160 @ 60 Hz
USB	1 x HID USB 1 x USB 2.0	1 x HID USB 1 x USB 2.0
Analog Audio	Supported	Supported
RS232	Supported	Supported
ENVIRONMENTAL (PARTIAL LIST)		
Shock	MIL-STD-810G, Method 516.7 Procedure I with a peak amplitude of 40 ± 4.0g	
Vibration	MIL-STD-810G, Method 514.7 Procedure I for operational use on a Category 20 wheeled Ground Vehicles	
Humidity	MIL-STD-810G, Method 507.6, Procedure I based upon Table 507.6-I	
Temperature	Operating - 46°C to 52°C (-51°F to 125°F); Storage -51°C to 71°C (-60°F to 160°F)	
Altitude	MIL-STD-810G, Method 500.6 Procedure I	
Immersion	MIL-STD-810G, Method 512.6 Procedure I to a depth of 3 meters in fresh water	
Salt Fog	MIL-STD-810G, Method 509.6.	
Blowing Sand	MIL-STD-810G, Method 510.6 Procedure II with 10.6 to 17.7 grams per cubic meter (g/m3)	
Blowing Dust	MIL-STD-810G, Method 510.6 Procedure I with 0.006 g/m3 silica flour dust from 0.0001mm to 0.01mm in diameter blowing at a velocity of 1.5 ±0.2 m/s	

MODEL	FKCE11PH60-NTR	FKFE11PH60-NTR
POWER (TX/RX)		
DC Input	Nominal Power Input 28VDC (18V-36V)	
Power requirements	40W max power consumption	
REGULATORY COMPLIANCE		
Safety	MIL-STD-882	
EMI/EMC	MIL-STD-461	
Tests	CE102, CS101, CS114, CS115, CS116, RE102, RE103, CE101	
Security	Designed to TEMPEST Level A compliance	
RELIABILITY		
Standard	MIL-HDBK-216	
MTBF	65,000 hours of operation at 40°C	
HOW TO ORDER		
Extender Transmitter	FKCE11PH60T-NTR	
Extender Receiver	FKFE11PH60R-NTR	
Extender Transmitter & Receiver Kit	FKCE11PH60-NTR	

RELATED PRODUCTS	WR40-4TR/WK80-4TR/WX80-4TR
Protocol	RS-232
Baud Rate	115200 bit/s
Power	5VDC from KVM or extender
Switching Method	Cyclic Switching
Active Channel Indication	LED



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