



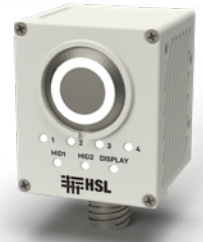
FKCE11PH60-NTR

## RUGGED FIBER/COPPER KVM EXTENDERS

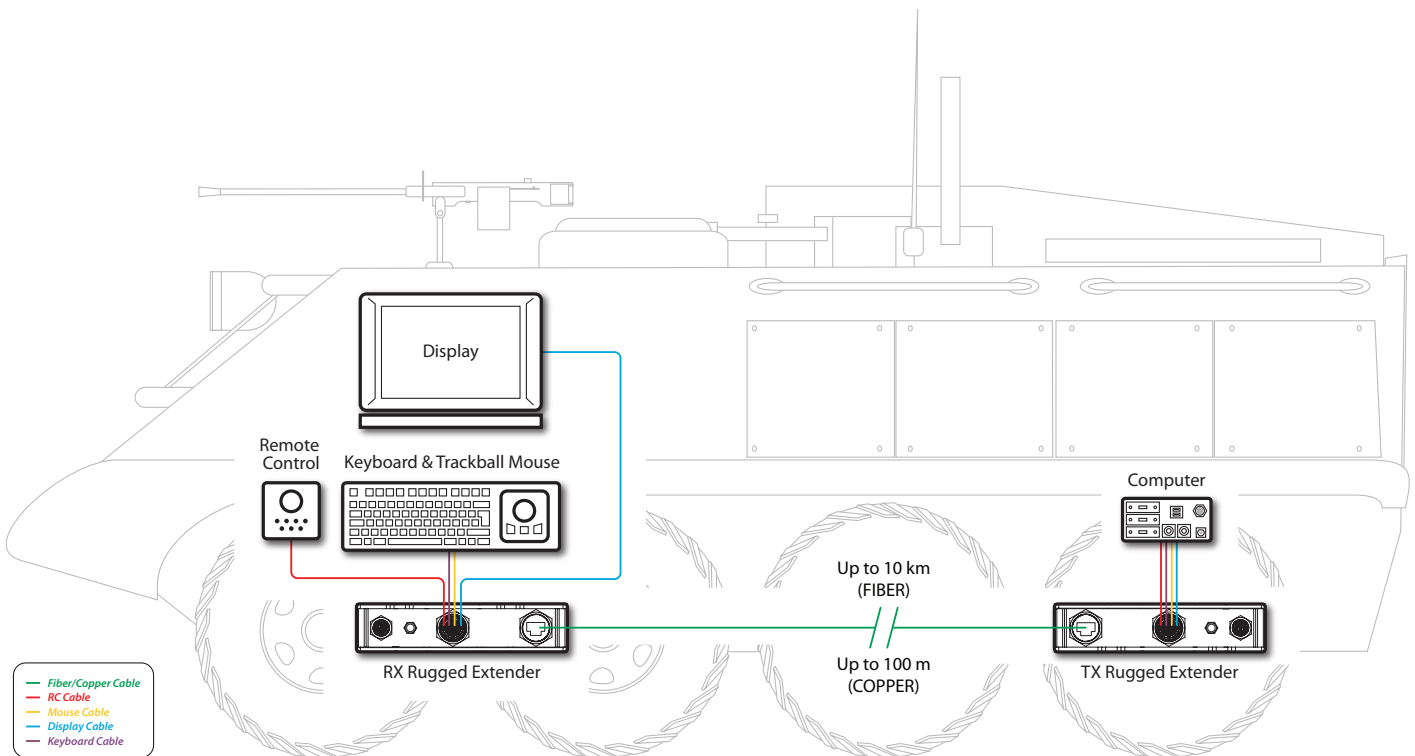
HSL's rugged, TEMPEST compliant, MIL-SPEC extenders facilitate installations where operators, computer sources and KVM switching products are distanced from each other.

The rugged extenders, available in copper or fiber versions, extend keyboard, mouse/trackball, 4K video, audio, IR, 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 can be used together with the rugged extenders to control a rugged KVM switch product distanced from the operator.



WR40-4TR



## SPECIFICATION

MODEL	FKCE11PH60-NTR	FKFE11PH60-NTR
<b>MAIN FEATURES</b>		
<b>Dimensions</b>	216.9 W x 215 D x 43.6 H mm (8.54 x 8.46 x 1.71 inch)	
<b>Extension Type</b>	Copper	Fiber
<b>Link Port</b>	RJ45	SFP* Data speed: 10 Gbps Wavelength: 1300nm Fiber optical connector: LC Single mode Fiber
<b>RECEIVER UNIT (RX)</b>		
<b>Display</b>	1xHDMI/DP signals	1xHDMI/DP signals
<b>Max Output Resolution</b>	Up to UHD 4K resolutions 3840x2160 @ 60 Hz	Up to UHD 4K resolutions 3840x2160 @ 60 Hz
<b>USB</b>	2 x HID USB 1 x USB 2.0	2 x HID USB 1 x USB 2.0
<b>Audio</b>	Supported	Supported
<b>IR Remote</b>	Supported	Supported
<b>RS232</b>	Supported	Supported
<b>TRANSMITTER UNIT (TX)</b>		
<b>Displays</b>	1 x HDMI/DP signals	1 x HDMI/DP signals
<b>Max Output Resolution</b>	Up to UHD 4K resolutions 3840x2160 @ 60 Hz	Up to UHD 4K resolutions 3840x2160 @ 60 Hz
<b>USB</b>	1 x HID USB 1 x USB 2.0	1 x HID USB 1 x USB 2.0
<b>Audio</b>	Supported	Supported
<b>IR Remote</b>	Supported	Supported
<b>RS232</b>	Supported	Supported
<b>ENVIRONMENTAL (PARTIAL LIST)</b>		
<b>Shock</b>	MIL-STD-810G, Method 516.7 Procedure I with a peak amplitude of 40 ± 4.0g	
<b>Vibration</b>	MIL-STD-810G, Method 514.7 Procedure I for operational use on a Category 20 wheeled Ground Vehicles	
<b>Humidity</b>	MIL-STD-810G, Method 507.6, Procedure I based upon Table 507.6-I	
<b>Temperature</b>	Operating - 46°C to 52°C (-51°F to 125°F); Storage -51°C to 71°C (-60°F to 160°F)	
<b>Altitude</b>	MIL-STD-810G, Method 500.6 Procedure I	
<b>Immersion</b>	MIL-STD-810G, Method 512.6 Procedure I to a depth of 3 meters in fresh water	
<b>Salt Fog</b>	MIL-STD-810G, Method 509.6.	
<b>Blowing Sand</b>	MIL-STD-810G, Method 510.6 Procedure II with 10.6 to 17.7 grams per cubic meter (g/m3)	
<b>Blowing Dust</b>	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	

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<b>POWER (TX/RX)</b>		
<b>DC Input</b>	Nominal Power Input 28VDC (18V-36V)	
<b>Power requirements</b>	40W max power consumption	
<b>REGULATORY COMPLIANCE</b>		
<b>Safety</b>	MIL-STD-882	
<b>EMI/EMC</b>	MIL-STD-461	
<b>Tests</b>	CE102, CS101, CS114, CS115, CS116, RE102, RE103, CE101	
<b>Security</b>	Designed to TEMPEST Level A compliance	
<b>RELIABILITY</b>		
<b>Standard</b>	MIL-HDBK-216	
<b>MTBF</b>	65,000 hours of operation at 40°C	
<b>HOW TO ORDER</b>		
<b>Extender Transmitter</b>	FKCE11PH60T-NTR	
<b>Extender Receiver</b>	FKFE11PH60R-NTR	
<b>Extender Transmitter &amp; Receiver Kit</b>	FKCE11PH60-NTR	
<b>Remote Control</b>	WR40-4TR	

MODEL	WR40-4TR
<b>Protocol</b>	RS-232
<b>Baud Rate</b>	115200 bit/s
<b>Power</b>	5VDC from KVM or extender
<b>Switching Method</b>	Cyclic Switching
<b>Active Channel Indication</b>	LED



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