

## CABLE ASSEMBLY SOLUTIONS FOR GOGO X3 SYSTEMS

PIC Wire & Cable developed a series of cable assemblies approved for use with Gogo® Business Aviation's X3 data connectivity system. The X3 works in tandem with the AVANCE L5 system to provide enhanced in-flight connectivity. The AVANCE L5 is required to be installed in the aircraft for the X3 to operate. Assemblies are customizable and designed to meet the application's unique loss, length, weight and flexibility requirements. Pre-engineered assembly drawings are available to simplify the US Federal Aviation Administration (FAA) submission process for modifications and installations.

### X3 CABLE OPTIONS

PIC Wire & Cable offers a variety of PICMates RF and RF ULTRALITE® cable solutions that meet or exceed X3 system performance requirements. These high quality cables were specially designed as low loss options, with the ULTRALITE line optimized for applications that require lightweight, flexible cables.

MAXIMUM CABLE LENGTH (INCHES) BY APPLICATION					
Cable P/N	Weight lbs/100 ft (kg/100 m)	Bend Radius in (mm)	X3 to AVANCE L5 (900 MHz)		X3 & AVANCE L5 to FWD/AFT MB13 ANT (900 MHz)
			Optimal Loss (0.5 dB)	Max Loss (1 dB)	Max Loss (3 dB)
<b>S86208</b>	2.0 (2.9)	0.65 (16.51)	15	56	219
<b>S33141</b>	6.5 (9.7)	1.40 (35.56)	32	118	460
<b>S55122</b>	8.3 (12.4)	1.55 (39.37)	43	155	607
<b>S22089</b>	18.0 (26.8)	2.50 (63.50)	62	228	889
<b>UH44193</b>	1.9 (2.9)	0.80 (20.32)	20	75	294
<b>UH67163</b>	3.4 (5.1)	1.20 (30.48)	35	128	501
<b>UH22089</b>	7.2 (10.7)	1.70 (43.18)	63	228	890
<b>UH25107</b>	12.0 (17.9)	2.50 (63.50)	78	285	1114

### X3 CONNECTOR OPTIONS

PIC Wire & Cable also has several matching SMA and TNC connectors for its RF and RF ULTRALITE cables to meet unique application requirements.

Cable P/N	SMA Str. Plug	TNC Str. Plug	TNC 90 Plug
<b>S86208</b>	190814	190808	190809
<b>S33141</b>	190314	190308	190309
<b>S55122</b>	190614	190608	190609
<b>S22089</b>	N/A	190408	190409
<b>UH44193</b>	150114	150108	150109
<b>UH67163</b>	150514	150508	150509
<b>UH22089</b>	150414	150408	150409
<b>UH25107</b>	N/A	190408	190409

## ASSEMBLY PART NUMBER BUILDER

Accelerate the cable assembly procurement process by building a part number with design details that meet an application’s specific requirements. Ready to use engineering drawings are provided to streamline the FAA submission process for part modifications and installations.

Engineering drawings for cable assemblies are available for download at [www.picwire.com/assemblies/assembly-worksheets](http://www.picwire.com/assemblies/assembly-worksheets).

Sample Part Number: 11012-4832- **W** **X** **YYYY** - **ZZ**

W = CABLE			
W	P/N	W	P/N
1	S86208	5	UH44193
2	S33141	6	UH67163
3	S55122	7	UH22089
4	S22089	8	UH25107

X = CONNECTOR CONFIGURATION		
X	END A	END B
1	SMA Str. Plug	SMA Str. Plug
2	TNC Str. Plug	TNC Str. Plug
3	TNC Str. Plug	TNC 90° Plug

YYYY = LENGTH (INCHES)	
YYYY	LENGTH
0001	1"
....	....
9999	9999"

ZZ = SUB SYSTEM DESIGNATOR					
ZZ	FROM	TO	ZZ	FROM	TO
01	X3 TM 1	L5 TM 1	07	X3 FWD ANT J1	FWD MB13 ANT J1
02	X3 TM 2	L5 TM 2	08	X3 FWD ANT J3	FWD MB13 ANT J3
03	X3 ATG2 FWD V1	L5 FWD V1	09	X3 AFT ANT J1	AFT MB13 ANT J1
04	X3 ATG2 AFT V3	L5 AFT V3	10	X3 AFT ANT J3	AFT MB13 ANT J3
05	X3 FWD ANT J4	FWD MB13 ANT J4	11	L5 FWD H1	FWD MB13 ANT J2
06	X3 AFT ANT J4	AFT MB13 ANT J4	12	L5 AFT H3	AFT MB13 ANT J2