

# GigaXtend XS Series

## Extended Spectrum Taps



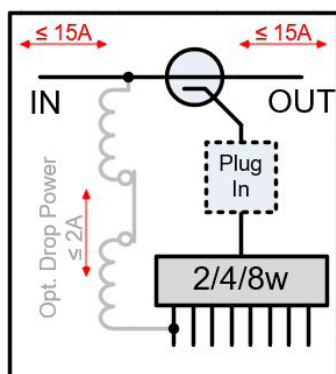
**XST-28-20**  
(front view)

The GigaXtend™ family of Taps and Line Passives injects immediate cost and performance benefits into existing HFC networks, as well as positions cable operators to seamlessly extend the bandwidth capabilities of their HFC networks to 2GHz and beyond.

GigaXtend technology is essential to MSOs looking to minimize costs associated with N+0 deployments, eliminate amplifier re-spacing or reduce the need for additional amplifiers during bandwidth upgrades, or simply want to extend the spectrum of the HFC network beyond 2GHz. A further benefit of GigaXtend is future support for RF performance beyond 3GHz through a simple faceplate upgrade. GigaXtend is compatible with any delivery technology, including Frequency Division Duplexed (FDD), Full Duplex DOCSIS (FDX), as well as Extended Spectrum DOCSIS (ESD).

## Features

- Industry-leading loss and bandwidth extends reach and power of any outside plant, especially fiber deep Node+0 deployments and may upgrade plant bandwidth without amplifier respacing
- Base supports future faceplate upgrade of > 3GHz
- >15A continuous AC power passing, with uninterruptable AC/RF bypass
- Optional: Up to 2A drop power on single F tap port (powering small cell, 5G, etc). Refer to ANW1538 for drop power option.
- Plug in conditioner, supporting Cable Sim/EQ or Return Attenuation
- 90-degree, screw-less 5/8-24 entry port, increasing reliability and installation speed
- Environmentally hardened, powder-coated, chip resistant aluminum housing for extreme outdoor conditions
- Waterproof and RFI gaskets in faceplate. New material with any faceplate upgrade.



Functional Schematic

# Specifications

## GigaXtend 8 Port Taps

ATX PART NUMBER		XST-28-14T		XST-28-17		XST-28-20		XST-28-23		XST-28-26		XST-28-29	
NOMINAL TAP VALUE, dB		14		17		20		23		26		29	
SPECIFICATION	MHz	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Insertion Loss IN-OUT dB	5	-	-	3.3	3.8	2.0	2.4	1.4	2.0	1.0	1.2	0.9	1.1
	10	-	-	3.3	3.8	2.0	2.2	1.4	1.8	1.0	1.1	0.9	1.1
	42	-	-	3.3	3.8	2.0	2.2	1.4	1.8	1.0	1.1	0.9	1.1
	54	-	-	3.3	3.8	2.0	2.2	1.4	1.8	1.0	1.1	0.9	1.1
	85	-	-	3.3	3.8	2.0	2.2	1.4	1.8	1.0	1.1	0.9	1.1
	108	-	-	3.3	3.8	2.1	2.3	1.5	1.8	1.1	1.2	1.0	1.2
	204	-	-	3.3	3.8	2.1	2.3	1.5	1.8	1.1	1.2	1.0	1.2
	258	-	-	3.3	3.8	2.1	2.3	1.5	1.8	1.1	1.2	1.0	1.2
	300	-	-	3.3	3.8	2.2	2.4	1.5	1.8	1.1	1.3	1.0	1.2
	396	-	-	3.3	3.8	2.2	2.4	1.6	1.9	1.1	1.3	1.0	1.3
	492	-	-	3.3	3.8	2.3	2.5	1.6	1.9	1.2	1.4	1.1	1.3
	684	-	-	3.3	3.8	2.4	2.6	1.7	2.0	1.2	1.5	1.1	1.4
	834	-	-	3.3	3.8	2.4	2.6	1.7	2.0	1.3	1.6	1.2	1.4
	1002	-	-	3.3	3.8	2.5	2.7	1.8	2.3	1.3	1.6	1.2	1.4
	1218	-	-	3.3	3.8	2.6	2.8	1.9	2.4	1.4	1.8	1.3	1.5
	1410	-	-	3.4	3.9	2.7	2.9	2.0	2.4	1.5	1.9	1.3	1.6
	1602	-	-	3.5	4.0	2.8	3.0	2.0	2.5	1.5	2.0	1.4	1.6
1800	-	-	3.6	4.1	2.9	3.1	2.1	2.5	1.6	2.1	1.4	1.7	
2050	-	-	3.6	4.1	3.0	3.2	2.2	2.7	1.7	2.2	1.5	1.8	
SPECIFICATION	MHz	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Tap Loss IN-TAPn dB	5	13.5	14.1	20.1	21.4	22.5	23.5	24.0	25.0	27.0	28.0	29.5	30.1
	10	13.0	13.8	19.4	19.9	21.0	22.0	24.0	25.0	27.0	28.0	29.5	30.1
	42	13.1	13.8	19.4	19.9	21.0	22.0	24.0	25.0	27.0	28.0	29.5	30.1
	54	13.1	13.8	19.4	19.9	21.0	22.0	24.0	25.1	27.0	28.0	29.5	30.1
	85	13.2	13.9	19.3	19.8	21.1	22.1	24.1	25.1	27.0	28.1	29.5	30.2
	108	13.3	13.9	19.3	19.8	21.1	22.1	24.1	25.2	27.1	28.1	29.5	30.2
	204	13.5	14.0	19.2	19.7	21.2	22.2	24.2	25.3	27.1	28.2	29.5	30.3
	258	13.6	14.1	19.2	19.7	21.3	22.3	24.3	25.4	27.1	28.3	29.5	30.3
	300	13.7	14.2	19.3	19.8	21.3	22.3	24.3	25.4	27.2	28.3	29.5	30.4
	396	14.0	14.5	19.3	19.8	21.4	22.4	24.4	25.6	27.2	28.4	29.5	30.4
	492	14.2	14.7	19.4	19.9	21.5	22.5	24.5	25.7	27.3	28.5	29.5	30.5
	684	14.6	15.1	19.6	20.1	21.6	22.6	24.6	26.0	27.4	28.6	29.5	30.7
	834	15.0	15.5	19.7	20.2	21.9	22.9	24.8	26.3	27.4	28.8	29.5	30.8
	1002	15.4	15.9	19.8	20.3	22.0	23.0	25.0	26.5	27.5	29.0	29.5	30.9
	1218	15.9	16.4	20.0	21.4	22.2	23.2	25.2	26.8	27.6	29.2	29.5	31.1
	1410	16.4	16.9	20.2	21.8	22.4	23.4	25.4	27.0	27.7	29.4	29.5	31.2
	1602	16.9	17.4	20.4	22.1	22.6	23.6	25.6	27.4	27.8	29.6	29.5	31.3
1800	17.3	17.9	20.7	22.5	22.8	23.8	25.8	27.7	27.9	29.8	29.5	31.5	
2050	18.0	18.8	21.0	23.0	23.0	24.0	26.0	28.0	28.0	30.0	29.5	31.7	

## Specifications

### GigaXtend 8 Port Taps - Continued

ATX PART NUMBER		XST-28-14T		XST-28-17		XST-28-20		XST-28-23		XST-28-26		XST-28-29	
NOMINAL TAP VALUE, dB		14		17		20		23		26		29	
SPECIFICATION	MHz			MIN		MIN		MIN		MIN		MIN	
Isolation, OUT-TAPn dB	5-10			24		27		29		34		36	
	10-100			28		28		29		34		36	
	100-750			27		28		29		36		33	
	750-1250			27		28		32		36		32	
	1250-2050			25		28		30		34		32	
SPECIFICATION	MHz	MIN		MIN		MIN		MIN		MIN		MIN	
Isolation, TAP TO TAP, dB	10-50	16		16		16		16		16		16	
	50-100	20		20		20		20		20		20	
	100-750	20		20		20		20		20		20	
	750-1002	20		20		20		20		20		20	
	1002-1250	20		20		20		20		20		20	
	1250-1825	16		16		16		16		16		16	
	1825-2050	12		12		12		12		12		12	

# Specifications

## GigaXtend 4 Port Taps

ATX PART NUMBER		XST-24-08T		XST-24-11		XST-24-14		XST-24-17		XST-24-20		XST-24-23		XST-24-26		XST-24-29	
NOMINAL TAP VALUE, dB		8		11		14		17		20		23		26		29	
SPECIFICATION	MHz	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Insertion Loss IN-OUT dB	5	-	-	4.2	4.6	3.0	3.3	1.8	2.2	1.5	1.6	0.8	1.1	0.6	0.9	0.5	0.7
	10	-	-	4.2	4.6	3.0	3.3	1.8	2.2	1.5	1.6	0.8	1.1	0.6	0.9	0.5	0.7
	42	-	-	4.2	4.6	3.0	3.3	1.8	2.2	1.5	1.6	0.8	1.1	0.6	0.9	0.5	0.7
	54	-	-	4.2	4.6	3.0	3.3	1.8	2.2	1.5	1.6	0.8	1.1	0.6	0.9	0.5	0.7
	85	-	-	4.2	4.6	3.0	3.3	1.8	2.2	1.5	1.6	0.8	1.1	0.6	0.9	0.5	0.7
	108	-	-	4.2	4.6	3.1	3.4	1.9	2.2	1.6	1.7	0.9	1.1	0.7	0.9	0.6	0.7
	204	-	-	4.2	4.6	3.1	3.4	1.9	2.2	1.6	1.7	0.9	1.1	0.7	0.9	0.6	0.7
	258	-	-	4.2	4.6	3.1	3.4	1.9	2.2	1.6	1.7	0.9	1.1	0.7	0.9	0.6	0.7
	300	-	-	4.2	4.6	3.1	3.4	1.9	2.2	1.7	1.8	0.9	1.1	0.7	0.9	0.6	0.7
	396	-	-	4.2	4.6	3.2	3.4	2.0	2.3	1.7	1.8	1.0	1.2	0.7	1.0	0.7	0.8
	492	-	-	4.2	4.6	3.2	3.5	2.0	2.3	1.8	1.9	1.0	1.2	0.8	1.0	0.7	0.8
	684	-	-	4.2	4.6	3.3	3.5	2.1	2.4	1.9	2.0	1.1	1.3	0.8	1.1	0.8	0.9
	834	-	-	4.2	4.6	3.3	3.6	2.1	2.5	1.9	2.1	1.2	1.4	0.9	1.2	0.8	1.0
	1002	-	-	4.2	4.6	3.4	3.6	2.1	2.5	2.0	2.2	1.2	1.4	0.9	1.2	0.9	1.1
	1218	-	-	4.2	4.6	3.5	3.7	2.2	2.6	2.1	2.3	1.3	1.6	1.0	1.4	1.0	1.2
	1410	-	-	4.3	4.7	3.6	3.9	2.3	2.7	2.2	2.4	1.4	1.7	1.0	1.5	1.1	1.3
	1602	-	-	4.3	4.7	3.8	4.1	2.3	2.8	2.3	2.5	1.5	1.8	1.1	1.6	1.1	1.3
1800	-	-	4.4	4.8	4.0	4.3	2.4	2.9	2.4	2.7	1.6	1.9	1.1	1.7	1.2	1.4	
2050	-	-	4.6	5.0	4.2	4.5	2.5	3.0	2.5	2.8	1.7	2.0	1.2	1.8	1.3	1.5	
SPECIFICATION	MHz	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Tap Loss IN-TAPn dB	5	9.0	9.5	14.0	15.7	16.6	18.2	18.5	19.5	21.5	22.0	24.0	25.0	26.0	27.0	29.0	29.8
	10	9.0	9.8	13.1	13.7	15.4	16.6	18.0	19.0	21.0	21.5	24.0	25.0	26.0	27.0	29.0	29.8
	42	9.0	9.8	13.0	13.7	15.4	16.6	18.0	19.0	21.0	21.5	24.0	25.0	26.0	27.0	29.0	29.8
	54	9.0	9.8	13.0	13.8	15.4	16.6	18.0	19.0	21.0	21.5	24.0	25.0	26.0	27.0	29.0	29.8
	85	9.0	9.8	12.9	13.8	15.3	16.6	18.0	19.0	21.0	21.5	24.0	25.0	26.0	27.0	29.0	29.8
	108	9.0	9.8	12.9	13.9	15.3	16.5	18.1	19.1	21.0	21.6	24.0	25.0	26.0	27.1	29.0	29.8
	204	9.1	9.8	12.7	14.0	15.2	16.5	18.1	19.1	21.0	21.6	24.0	25.0	26.0	27.1	29.0	29.8
	258	9.1	9.8	12.8	14.0	15.2	16.5	18.1	19.1	21.0	21.6	24.0	25.0	26.0	27.1	29.0	29.8
	300	9.1	9.8	12.8	14.1	15.3	16.5	18.1	19.1	21.0	21.6	24.0	25.0	26.0	27.1	29.0	29.8
	396	9.2	9.8	12.9	14.1	15.3	16.5	18.1	19.2	21.0	21.7	24.0	25.0	26.0	27.2	29.0	29.8
	492	9.2	9.8	13.0	14.2	15.4	16.5	18.2	19.2	21.0	21.7	24.0	25.0	26.0	27.2	29.0	29.8
	684	9.3	9.8	13.1	14.4	15.6	16.5	18.2	19.3	21.0	21.8	24.0	25.0	26.0	27.3	29.0	29.8
	834	9.3	10.0	13.3	14.4	15.7	16.5	18.3	19.3	21.0	21.8	24.0	25.0	26.0	27.3	29.0	29.9
	1002	9.4	10.0	13.5	14.4	15.8	16.5	18.3	19.4	21.0	21.9	24.0	25.0	26.0	27.4	29.0	29.9
	1218	9.5	10.4	13.7	14.5	16.0	16.5	18.4	19.5	21.0	22.0	24.0	25.0	26.0	27.5	29.0	30.0
	1410	10.0	10.9	13.9	14.7	16.2	16.8	18.5	19.9	21.0	22.1	24.0	25.1	26.0	27.6	29.0	30.0
	1602	10.6	11.4	14.1	14.9	16.6	17.2	18.5	20.4	21.0	22.2	24.0	25.1	26.0	27.7	29.0	30.0
1800	11.2	11.9	14.3	15.2	16.9	17.6	18.6	20.8	21.0	22.3	24.0	25.2	26.0	27.9	29.0	30.0	
2050	12.0	13.0	14.5	15.5	17.2	18.0	18.7	21.5	21.0	22.5	24.0	25.3	26.0	28.0	29.0	30.0	

# Specifications

## GigaXtend 4 Port Taps - Continued

ATX PART NUMBER		XST-24-08T	XST-24-11	XST-24-14	XST-24-17	XST-24-20	XST-24-23	XST-24-26	XST-24-29
NOMINAL TAP VALUE, dB		8	11	14	17	20	23	26	29
SPECIFICATION	MHz		MIN	MIN	MIN	MIN	MIN	MIN	MIN
<b>Isolation, OUT-TAPn dB</b>	5-10		18.5	21.5	25	30	32	34	35
	10-100		22	25	25	30	34	34	35
	100-750		25	25	26	32	36	38	35
	750-1250		22	24	28	30	32	34	35
	1250-2050		21	23	26	30	32	30	36
SPECIFICATION	MHz	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
<b>Isolation, TAP TO TAP, dB</b>	10-50	16	16	16	16	16	16	16	16
	50-100	20	20	20	20	20	20	20	20
	100-750	20	20	20	20	20	20	20	20
	750-1002	20	20	20	20	20	20	20	20
	1002-1250	18	18	20	20	20	20	20	20
	1250-1825	16	16	16	16	16	16	16	16
	1825-2050	12	12	12	12	12	12	12	12

# Specifications

## GigaXtend 2 Port Taps

ATX PART NUMBER		XST-22-05T		XST-22-08		XST-22-11		XST-22-14		XST-22-17		XST-22-20		XST-22-23		XST-22-26		XST-22-29	
NOMINAL TAP VALUE, dB		5		8		11		14		17		20		23		26		29	
SPECIFICATION	MHz	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Insertion Loss IN-OUT dB	5	-	-	4.0	4.3	3.0	3.3	2.0	2.3	1.2	1.5	1.0	1.2	0.6	0.9	0.5	0.8	0.5	0.8
	10	-	-	4.0	4.3	3.0	3.3	2.0	2.3	1.2	1.5	1.0	1.2	0.6	0.9	0.5	0.8	0.5	0.8
	42	-	-	4.0	4.3	3.0	3.3	2.0	2.3	1.2	1.5	1.0	1.2	0.6	0.9	0.5	0.8	0.5	0.8
	54	-	-	4.0	4.3	3.0	3.3	2.0	2.3	1.2	1.5	1.0	1.2	0.6	0.9	0.5	0.8	0.5	0.8
	85	-	-	4.0	4.3	3.0	3.3	2.0	2.3	1.2	1.5	1.0	1.3	0.6	0.9	0.5	0.9	0.5	0.8
	108	-	-	4.0	4.3	3.1	3.4	2.0	2.3	1.3	1.5	1.1	1.3	0.7	1.0	0.6	0.9	0.6	0.9
	204	-	-	4.0	4.3	3.1	3.4	2.0	2.3	1.3	1.5	1.1	1.4	0.7	1.0	0.6	1.0	0.6	0.9
	258	-	-	4.0	4.3	3.1	3.4	2.0	2.3	1.3	1.5	1.1	1.4	0.7	1.0	0.6	1.0	0.6	0.9
	300	-	-	4.0	4.3	3.1	3.4	2.0	2.3	1.3	1.5	1.1	1.4	0.7	1.0	0.6	1.0	0.6	0.9
	396	-	-	4.0	4.4	3.1	3.5	2.0	2.4	1.4	1.6	1.1	1.4	0.8	1.0	0.7	1.0	0.7	0.9
	492	-	-	4.1	4.4	3.2	3.5	2.1	2.4	1.4	1.6	1.2	1.5	0.8	1.1	0.7	1.1	0.7	1.0
	684	-	-	4.1	4.5	3.2	3.6	2.1	2.5	1.5	1.7	1.2	1.5	0.9	1.1	0.8	1.1	0.8	1.0
	834	-	-	4.1	4.5	3.3	3.6	2.1	2.5	1.6	1.7	1.3	1.6	0.9	1.2	0.8	1.1	0.8	1.1
	1002	-	-	4.1	4.5	3.3	3.6	2.1	2.5	1.6	1.8	1.3	1.7	1.0	1.2	0.9	1.2	0.8	1.1
	1218	-	-	4.1	4.6	3.4	3.7	2.2	2.6	1.7	1.9	1.4	1.8	1.1	1.4	1.0	1.3	0.9	1.2
	1410	-	-	4.1	4.6	3.4	3.8	2.2	2.6	1.8	2.0	1.4	1.9	1.2	1.5	1.1	1.4	1.0	1.3
	1602	-	-	4.2	4.7	3.5	3.8	2.3	2.7	1.9	2.1	1.5	1.9	1.2	1.6	1.1	1.5	1.0	1.3
1800	-	-	4.2	4.7	3.5	3.9	2.3	2.7	2.0	2.2	1.5	2.0	1.3	1.7	1.2	1.6	1.1	1.4	
2050	-	-	4.2	4.8	3.6	4.0	2.3	2.8	2.1	2.4	1.6	2.1	1.4	1.8	1.3	1.7	1.2	1.5	
SPECIFICATION	MHz	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Tap Loss IN-TAPn dB	5	4.5	5.4	10.8	12.7	12.4	13.8	15.3	16.8	17.5	18.0	20.5	22.0	23.0	23.8	26.0	27.0	29.5	30.5
	10	4.5	5.4	10.1	10.7	12.1	12.6	15.0	15.7	17.0	17.5	20.0	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	42	4.5	5.4	10.0	10.7	12.1	12.6	15.0	15.7	17.0	17.5	20.0	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	54	4.5	5.4	9.9	10.7	12.1	12.6	15.0	15.7	17.0	17.5	20.0	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	85	4.5	5.4	9.7	10.6	12.1	12.6	15.0	15.7	17.0	17.5	20.0	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	108	4.6	5.5	9.6	10.6	12.1	12.6	15.1	15.6	17.1	17.6	20.1	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	204	4.6	5.5	9.2	10.5	12.1	12.6	15.1	15.6	17.1	17.6	20.1	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	258	4.6	5.5	9.3	10.5	12.1	12.6	15.1	15.6	17.1	17.7	20.1	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	300	4.6	5.5	9.3	10.6	12.1	12.6	15.1	15.6	17.1	17.7	20.1	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	396	4.7	5.6	9.4	10.6	12.2	12.7	15.2	15.7	17.1	17.8	20.1	21.5	23.0	23.8	26.0	27.0	29.5	30.5
	492	4.7	5.6	9.5	10.7	12.2	12.7	15.2	15.7	17.2	17.9	20.2	21.6	23.0	23.8	26.0	27.0	29.5	30.5
	684	4.8	5.7	9.6	10.9	12.3	12.8	15.3	15.8	17.2	18.0	20.2	21.6	23.0	23.8	26.0	27.0	29.5	30.5
	834	4.8	5.8	9.8	11.0	12.3	12.8	15.3	15.8	17.3	18.1	20.3	21.6	23.0	23.8	26.0	27.0	29.5	30.5
	1002	4.9	5.9	10.0	11.2	12.4	12.9	15.4	15.9	17.3	18.2	20.3	21.6	23.0	23.8	26.0	27.0	29.5	30.5
	1218	5.0	6.0	10.2	11.4	12.5	13.0	15.5	16.0	17.4	18.3	20.4	21.6	23.0	23.9	26.0	27.0	29.5	30.5
	1410	5.4	6.4	10.4	11.6	12.7	13.2	15.6	16.2	17.5	18.4	20.5	21.6	23.0	24.0	26.0	27.0	29.6	30.5
	1602	5.9	6.9	10.6	11.8	12.9	13.4	15.7	16.4	17.6	18.6	20.5	21.7	23.0	24.0	26.0	27.1	29.7	30.5
1800	6.3	7.3	10.8	12.0	13.2	13.7	15.9	16.7	17.8	18.8	20.6	21.7	23.0	24.1	26.0	27.1	29.9	30.5	
2050	7.5	8.6	11.5	12.4	13.5	14.0	16.0	17.0	18.0	19.0	20.7	21.7	23.0	24.3	26.0	27.2	30.0	30.6	

## Specifications

### GigaXtend 2 Port Taps - Continued

ATX PART NUMBER		XST-22-05T	XST-22-08	XST-22-11	XST-22-14	XST-22-17	XST-22-20	XST-22-23	XST-22-26	XST-22-29
NOMINAL TAP VALUE, dB		5	8	11	14	17	20	23	26	29
SPECIFICATION	MHz		MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
Isolation, OUT-TAPn dB	5-10		16	18.5	21	26	29	32	34	38
	10-100		20	20	22	26	29	32	34	38
	100-750		21	22	23	27	30	32	34	37
	750-1250		20	22	23	27	30	30	31	34
	1250-2050		18	20	22	25	29	28	28	33
SPECIFICATION	MHz	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
Isolation, TAP TO TAP, dB	10-50	16	16	16	16	16	16	16	16	16
	50-100	20	19	20	20	20	20	20	20	20
	100-750	18	19	20	20	20	20	20	20	20
	750-1002	20	19	20	20	20	20	20	20	20
	1002-1250	20	19	20	20	20	20	20	20	20
	1250-1825	16	16	16	16	16	16	16	16	16
	1825-2050	12	12	12	12	12	12	12	12	12

### GigaXtend All Taps

FREQUENCY	Return Loss All Ports dB, Min	Return Loss, Terminating Taps, All Ports dB, Min
5-10 MHz	14	15
10-100 MHz	16	15
100-750 MHz	16	15
750-1002 MHz	16	15
1002-1250 MHz	16	15
1250-1825 MHz	14	14
1825-2050 MHz	12	12

Unless otherwise noted, specifications reflect typical performance and are referenced to 68° F (20° C). Specifications are based upon measurements made in accordance with SCTE and ANSI standards (where applicable), using standard frequency assignments.

POWER		
<b>POWER PASSING CONTINUOUS</b>	50-60Hz	15 Amp Max (at any 5/8" port)
	60-90VAC	For models with Drop Power Only: Refer to ANW1538 for details
<b>ANALOG HUM MODULATION * (5-2050MHZ)</b>		-60dBc @ 10A
		-55dBc @ 15A
<b>Digital Hum Modulation ** (54-1002MHz)</b>		<1% @ 15A
ENVIRONMENTAL & PHYSICAL		
<b>SHIELDING EFFECTIVENESS</b>	5-1002 MHz	≥ 120dB
	1003 - 1218 MHz	≥ 110dB
	1219 - 2050 MHz	≥ 100dB
<b>WATERPROOF RATING</b>	15 PSI, IP68	
<b>OPERATION TEMPERATURE</b>	-40°C to +60°C	
<b>HUMIDITY</b>	5-95% non-condensing	
<b>EMISSION</b>	FCC 15 subpart B ICES-003 CISPR 32 CISPR 35	
<b>ENVIRONMENTAL</b>	ASTM G 154 – Weathering	
	ASTM B 117 – salt spray	
	ASTM D 3359 – Chip Resist	
<b>DIMENSIONS</b>	141.9mm L * 118.85mm W * 69.6mm H / 5.587" L * 4.679" W * 2.74" H	
<b>WEIGHT</b>	0.54 kg / 1.2lbs	
<b>SURGE RESISTANCE</b>	6kV Combination Wave per IEEE C62.41 Category B3 on all ports	
<b>ELECTRICAL SAFETY</b>	UL62368-1	

\* Analog Hum measured with discrete carriers across band applied with AC current from IN to OUT ports of taps, as per ANSI/SCTE 16 2001R2007

\*\* Digital Hum as measured on Viavi VSE1100 with forward path 6MHz SC-QAM load applied with AC current from IN to OUT ports of taps. FCC mandates <3% digital hum as acceptable. Typical source MER 50dB, MER at OUT or TAP ports at 15A through path current is reduced <0.5dB (i.e no noticeable impact given measurement accuracy of test setup). Will be published with 1.8GHz RF load when gear becomes commercially available for source & test.

Unless otherwise noted, specifications reflect typical performance and are referenced to 68° F (20° C). Specifications are based upon measurements made in accordance with SCTE and ANSI standards (where applicable), using standard frequency assignments.

## GigaXtend Taps / Signal Conditioners

5-1218 MHz Cable Tilt Equalizers				XSA-CE-1218*								
SPECIFICATION	MHz	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22
<b>Insertion Loss (dB TYP)</b>	5	3.0	5.1	7.1	9.2	11.2	13.2	14.9	17.0	19.0	21.1	23.0
	50	2.7	4.5	6.3	8.1	9.8	11.5	13.0	14.8	16.5	18.3	20.0
	85	2.6	4.3	5.9	7.6	9.2	10.8	12.1	13.8	15.4	17.1	18.6
	102	2.5	4.2	5.7	7.3	8.9	10.4	11.8	13.4	14.9	16.5	18.0
	300	2.1	3.3	4.4	5.5	6.7	7.8	8.7	9.9	11.0	12.1	13.2
	550	1.7	2.5	3.2	4.0	4.7	5.4	6.1	6.8	7.5	8.3	9.0
	870	1.3	1.7	2.1	2.4	2.8	3.1	3.4	3.8	4.1	4.5	4.8
	1002	1.2	1.4	1.6	1.9	2.1	2.3	2.4	2.7	2.9	3.1	3.3
	1218*	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	+/- dB tol.	0.6	0.6	0.6	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5

\*maximum loss spec at 1218MHz is 1.5dB for all 1.2G Cable Equalizers



5-1800 MHz Cable Tilt Equalizers			XSA-CE-1800*								
SPECIFICATION	MHz	-2	-4	-6	-8	-10	-12	-14	-16	-18	-20
Insertion Loss (dB TYP)	5	3.1	5.1	7.2	9.2	11.3	13.4	15.4	17.5	19.5	21.6
	50	2.9	4.7	6.6	8.4	10.3	12.2	14.0	15.9	17.7	19.6
	85	2.8	4.5	6.3	8.0	9.8	11.6	13.3	15.2	16.9	18.7
	102	2.8	4.4	6.2	7.9	9.6	11.4	13.1	14.8	16.5	18.3
	300	2.4	3.8	5.2	6.5	8.0	9.4	10.7	12.2	13.5	14.9
	550	2.1	3.2	4.3	5.3	6.5	7.6	8.7	9.8	10.8	12.0
	870	1.8	2.5	3.4	4.1	4.9	5.7	6.5	7.3	8.0	8.8
	1002	1.7	2.3	3.0	3.6	4.3	5.0	5.7	6.4	7.0	7.7
	1218	1.3	2.2	2.5	2.9	3.5	4.0	4.4	4.9	4.4	4.9
	1800*	0.9	1.7	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.6
	+ dB tol.	0.6	0.6	0.6	1.0	1.0	1.0	1.5	1.5	1.5	1.5

\*maximum loss spec at 1800MHz is 1.5dB for all 1.8G Cable Equalizers

5-2050 MHz Cable Simulators		XSA-CS-2050*						
SPECIFICATION	MHz	2dB	4dB	6dB	8dB	10dB	12dB	15dB
Insertion Loss (dB TYP)	5	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	50	0.4	0.6	0.6	1	1.3	1.5	2.4
	85	0.5	1	1.1	1.7	2.2	2.6	3.3
	102	0.6	1.1	1.4	2.1	2.8	3.2	3.7
	200	0.9	1.7	2.8	3.9	4.6	5	5.7
	300	1.1	2.1	3.6	4.7	5.3	5.9	7.2
	550	1.5	2.9	4.5	5.8	7.2	8.4	10.1
	870	1.8	4.1	5.8	7.6	9.0	11.1	13.5
	1002	1.9	4.4	6.2	8.1	9.8	12	14.8
	1218	2	4.7	6.8	8.9	10.7	13.3	16.5
	1800	3.2	5.8	8.7	11.4	14.0	17.2	21.4
	2050	3.4	6.4	9.6	12.5	15.2	19.1	23.5
	+ dB tol.*	10%	10%	10%	10%	10%	10%	10%

\* +- dB tol minimum of 0.5dB in all cases

42 MHz Return Path Attenuator, Passband 2050MHz		XSA-RA-42-2050*													
SPECIFICATION	MHz	-03		-06		-09		-12		-15		-18		-21	
		TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Insertion Loss (dB MAX)	5	2.6	3.0	5.8	6.2	8.8	9.2	12.0	12.4	14.9	15.3	17.7	18.1	20.7	21.1
	42	4.2	4.6	6.9	7.4	9.8	10.3	12.7	13.2	15.6	16.1	18.6	19.1	21.3	21.8
	54	2.0	2.4	2.1	2.5	2.0	2.4	2.6	3.0	2.8	3.2	2.3	2.7	2.1	2.5
	102	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
	300	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
	550	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1
	870	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1
	1002	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2
	1218	0.6	1.4	0.6	1.4	0.6	1.5	0.6	1.5	0.6	1.5	0.6	1.4	0.6	1.4
	2050	1.0	1.7	1.0	1.7	1.0	1.8	1.0	1.8	1.0	1.8	1.0	1.7	1.0	1.7

85 MHz Return Path Attenuator, Passband 2050MHz		XSA-RA-85-2050-*													
SPECIFICATION	MHz	-03		-06		-09		-12		-15		-18		-21	
		TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
Insertion Loss (dB MAX)	5	1.2	1.6	4.3	4.7	7.4	7.9	10.7	11.1	13.7	14.2	16.4	16.9	19.8	20.3
	42	2.2	2.6	5.1	5.6	7.8	8.3	11.1	11.6	14.1	14.6	17.3	17.8	21.1	21.6
	85	3.2	3.6	6.2	6.7	9.1	9.6	12.1	12.6	14.9	15.5	18.2	18.7	21.2	21.7
	102	2.2	2.8	2.4	2.8	2.4	2.8	2.5	2.9	2.5	2.9	2.4	2.8	2.4	2.8
	300	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
	550	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1
	870	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1	0.5	1.1
	1002	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2
	1218	0.6	1.3	0.6	1.3	0.6	1.3	0.6	1.3	0.6	1.3	0.6	1.3	0.6	1.3
	2050	1.0	1.6	1.0	1.6	1.0	1.6	1.0	1.6	1.0	1.6	1.0	1.6	1.0	1.6

Unless otherwise noted, specifications reflect typical performance and are referenced to 68° F (20° C). Specifications are based upon measurements made in accordance with SCTE and ANSI standards (where applicable), using standard frequency assignments.

### Ordering Information

Part Number	Description
XST-22-*	2 Port Multi-Tap, 5-2050MHz, 15A thru, *= 05T,08,11,14,17,20,23,26,29 dB
XST-24-*	4 Port Multi-Tap, 5-2050MHz, 15A thru, *=08T,11,14,17,20,23,26,29 dB
XST-28-*	8 Port Multi-Tap, 5-2050MHz, 15A thru, *=14T,17,20,23,26,29 dB
XST-22D-*	2 Port Multi-Tap, 5-2050MHz, 15A thru, with Drop Power, *= 05T,08,11,14,17,20,23,26,29 dB
XST-24D-*	4 Port Multi-Tap, 5-2050MHz, 15A thru, with Drop Power, *= 08T,11,14,17,20,23,26,29 dB
XST-28D-*	8 Port Multi-Tap, 5-2050MHz, 15A thru, with Drop Power, *= 14T,17,20,23,26,29 dB
XST-24DU-*	4 Port Multi-Tap, 5-2050MHz, 15A thru, with Drop Power, w/o Plug-in, *= 08T, 11 dB
XST-28DU-*	8 Port Multi-Tap, 5-2050MHz, 15A thru, with Drop Power, w/o Plug-in, *= 11T, 14 dB
XST-24U-*	4 Port Multi-Tap, 5-2050MHz, 15A thru, w/o Plug-in, *= 08T,11 dB
XST-28U-*	8 Port Multi-Tap, 5-2050MHz, 15A thru, w/o Plug-in, *= 11T,14 dB
XSI-2-20	Power Inserter, 5-2050MHz, 20A
XSC-2-*	Wideband coupler 5-2050MHz, 15A thru, *=04, 08, 12, 16 dB coupler value
	3 way splitters (balanced,unbalanced) *=777, 959
XSA-CE-1800-*	Accessories, 1.8GHz Cable Equalizers, *=02,04,...20 dB
XSA-CE-1218-*	Accessories, 1.2GHz Cable Equalizers, *=02,04,...22 dB
XSA-CS-2050-*	Accessories, 2.05GHz Cable Simulators, *=02,04,06,08,10,12,15 dB
XSA-RA-42-2050-*	Accessories, 42MHz Return Attenuators with 54-2050MHz Passband, *=03,06,...21 dB
XSA-RA-85-2050-*	Accessories, 85MHz Return Attenuators with 102-2050MHz Passband, *=03,06,...21 dB
XSA-FUSE-15A	Accessories, 15A plug-in fuse for GigaXtend (not needed for taps)
XSA-TCG-10	Accessory: cutting guide for KS adapters, 10pc kit
XSA-KSP-10	Accessory: spare watertight plug for 5/8-24 port, 10pc kit
XSA-FUSE-SHUNT-10	Accessory: spare shunt signal director for fuse position (bus bar), 10pc kit
XSA-SHUNT-10	Accessory: spare 0dB RF shunt for plug in position, 10pc kit
XSA-TERMF-100	Accessory: 2GHz 75ohm RF Terminators (F-male), 100pc kit

NOTE: A 'T' suffix on tap part number indicates a Terminating tap that has no OUT port

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