

# Line passives (splitters)

## OSRX 02, 03, 33 outdoor splitters

technetix

- Compatible with Regal series splitters
- Excellent RF and hum modulation performance
- Designed for extreme environmental conditions



### Overview

OSRX outdoor splitters are compatible with the Regal series of outdoor splitters. The OSRX series includes 2-way, 3-way balanced and 3-way unbalanced splitters. Providing surge protection on all ports, and excellent RF and hum modulation performance, the splitters feature 5/8"-24 NEF-female ports for in and output cable connection on the housing.

The splitters may be strand mounted through the clamp at the back of the housing or surface mounted with an optional bracket. Tested under extreme environmental conditions, the splitters are designed to operate near salt water, along busy highways and in very hot conditions.

Specifications

		(MHz)	02	03	33
			2-way typical	3-way typical	3-way unbalanced typical
Insertion loss (dB)	In to Out Out 1	5 MHz	5.3	6.3	4.6
		10 MHz	3.5	6.3	4.6
		50 MHz	3.5	5.2	3.4
		100 MHz	3.5	5.2	3.4
		450 MHz	3.5	5.6	3.6
		550 MHz	3.6	5.8	3.7
		750 MHz	3.8	6.0	3.9
		870 MHz	3.9	6.1	4.0
		1000 MHz	4.1	6.4	4.2
		1218 MHz	4.6	7.3	4.8
	Out 2	5 MHz	5.3	7.6	9.1
		10 MHz	3.5	7.6	9.1
		50 MHz	3.5	5.4	6.7
		100 MHz	3.5	5.4	6.7
		450 MHz	3.5	5.6	6.8
		550 MHz	3.6	5.8	6.9
		750 MHz	3.8	5.9	7.1
		870 MHz	3.9	6.0	7.3
		1000 MHz	4.1	6.4	7.8
		1218 MHz	4.6	7.9	9.0
	Out 3	5 MHz		6.6	8.0
		10 MHz		6.6	8.0
		50 MHz		5.4	6.7
		100 MHz		5.4	6.7
		450 MHz		5.6	6.8
		550 MHz		5.8	6.9
		750 MHz		5.8	7.1
		870 MHz		5.8	7.2
		1000 MHz		6.2	7.8
		1218 MHz		7.5	9.0
Return loss (dB, typ)	All ports		Minimum	Minimum	Minimum
		10–47	16.0	16.0	16.0
		47–950	16.0	16.0	16.0
		950–1218	16.0	16.0	16.0
Isolation	Port to port		Minimum	Minimum	Minimum
		5–65	26.0	26.0	26.0
		65–860	24.0	24.0	24.0
		860–1218	22.0	22.0	22.0

## Specifications

		(MHz)	02	03	33
			2-way typical	3-way typical	3-way unbalanced typical
Screening efficiency (dB) <sup>1</sup>		5–300		>95	
		300–470		>90	
		470–950		>85	
		950–1000		>85	
Shielding effectiveness (dBi) <sup>2</sup>		30–1000		≥95	
		1000–1218		≥85	
Power passing (Amps AC/DC) <sup>3</sup>				12	
Fuse rating (Amps AC/DC)				15	
Hum modulation (dB, min) <sup>4</sup>	All ports				
		10–860		≥70	
		860–1218		≥70	
Surge Class conformance <sup>5</sup>	All ports	2KV combination wave 2 Ω 1.2/50µs (Combination wave C3)			
Material	Housing	Aluminium			
Impedance (Ohm, typ)		75			
Dimensions (mm)	L x H x D	140x112x72			
Equipment Approval	CE				

### Notes

- 1 Tested according to EN 50083-2 2006
- 2 Tested according to SCTE IPS-TP-403
- 3 Range between 60-90 VAC/VDC
- 4 At 12 Amp power passing
- 5 Tested according to IEC 61000-4-5 2005
- 6 Additional loss included for Ingress Safe circuit  
Measurements taken at room temperature

## Mechanical & environmental specifications

Performance parameter	Details	
<b>Connectors</b>	Input & Output	KS-female (5/8"-24NEF)
<b>Water Immersion</b> (IP08)	Tighten torque on connectors	2.26Nm (< 20 In-Lb)
	Water Head	2m (6.56 ft)
	Duration	500 hrs
	Observation: No Water leak	No electrical degradation after dry
<b>Temperature cycling with humidity</b> (EN 60068-2-30:2005)	Temperature	+40°C to +60°C (+39.2°F to +140°F)
	Extreme temp duration	3 hrs
	Transient	3 hrs
	Humidity	95% RH
	Number of cycles 20	20
	Observation: (no water leakage)	No electrical degradation after dry
<b>High Temperature cycling</b> (EN 60068-2-2:2007)	Temperature	+60°C (+140°F)
	Duration	48 hrs
	Observation: No crack or damage	No electrical degradation after dry
<b>Drop Test</b> (EN 60068-2-32:1993, IEC 68-2-32:1975)	75cm (29.5 in) high onto concrete floor or metal plate surface	Corner, Edge & Port
	Number of drop for each impact point	1
	Observation: No crack on metal	No electrical performance degradation
<b>Salt Fog</b> (MSTM-B-117)	Tighten torque on connectors	2.26Nm (< 20 In-Lb)
	Temperature	+35oC (+95oF)
	Salt percentage & Acidity	5% & pH7
	Duration	672 hrs (28 days)
	Number of cycles	Continues
	Observation: (No electrical performance degradation)	No metal corrosion or salt incursion
<b>WEEE (2002/96/EC)</b>	Complete product	Marked with wheelie bin logo
<b>RoHS (2002/95/EC)</b>	Complete product	Complies to RoHS
<b>Temperature</b>	Operating temperature	-40°C to +60°C (-40°F to +140°F)

## Order information

Item number	Item code	Description
<b>19009597</b>	OSRX-02	OUTDOOR SPLITTER REGAL 2 WAY 1.2 GHZ ACTIVE
<b>19009600</b>	OSRX-02/F	OUTDOOR SPLITTER REGAL 2 WAY 1.2 GHZ FP ACTIVE
<b>19009598</b>	OSRX-03	OUTDOOR SPLITTER REGAL 3 WAY 1.2 GHZ ACTIVE
<b>19009601</b>	OSRX-03/F	1OUTDOOR SPLITTER REGAL 3 WAY 1.2 GHZ FP ACTIVE
<b>19009599</b>	OSRX-33	OUTDOOR SPLITTER REGAL 3 WAY 1.2 GHZ UNBAL ACTIVE
<b>19009602</b>	OSRX-33/F	OUTDOOR SPLITTER REGAL 3 WAY 1.2 GHZ UNBAL FP ACTIVE