

STARLINE Passives

SSP-3Q SPLITTERS
SP-*Q DIRECTIONAL COUPLERS
SSP-PIQ, SSP-PIQ/SP POWER INSERTERS
1.2 GHz SYSTEM RF PASSIVES



FEATURES

- Support DOCSIS® 3.1 expanded bandwidth up to 1218 MHz
- Support existing install base with backward compatible faceplates
- Superior flexibility in installation with rotatable faceplate and swivel center seizure mechanism
- Easily configured to enable or block AC power as needed in the network
- Protect valuable network equipment investment with optional heavy surge suppression in Power Inserter



PRODUCT OVERVIEW

ARRIS STARLINE SSP-Q System Passives are available in a variety of configurations including directional couplers, balanced and unbalanced splitters, and power inserters. These AC power-passing, two-way devices operate within an RF passband of 1.2 GHz and are enclosed in die-cast 360 aluminum alloy housings that are equipped for strand and pedestal mounting. The SSP-Q series employs a swivel center conductor seizure mechanism and a rotatable faceplate to ensure that users can configure the units in a variety of input/output and RF/AC combinations. These features provide users flexible installation options and reduce the need for cable loops. The SSP-Q series is also equipped with shorting bars which can be removed for power blocking or replaced with fuses as needed.

SSP-*Q Series System Passives 5-1218 MHz

SPECIFICATIONS INSERTION LOSS

Insertion Loss (dB)	5–150 MHz Typ/Max	151–450 MHz Typ/Max	451–600 MHz Typ/Max	601–750 MHz Typ/Max	751–850 MHz Typ/Max	851–1000 MHz Typ/Max	1001–1218 MHz Typ/Max
SSP-PIQ and SSP-PIQ/SP	0.3/0.6	0.4/0.6	0.4/0.7	0.4/0.8	0.4/0.9	0.5/1.1	0.9/1.6
SSP-3Q	3.8/4.4	3.8/4.4	3.9/4.6	4.1/5.0	4.3/5.2	4.5/5.5	5.0/6.3
SSP-7Q	Output	1.9/2.7	2.1/2.7	2.1/3.0	2.4/3.3	2.6/3.6	3.4/4.2
	Tap Loss	7.7/8.0	7.6/8.0	7.5/8.2	7.5/8.5	7.6/8.7	8.5/9.7
SSP-9Q	Output	1.4/1.8	1.6/2.0	1.6/2.3	1.8/2.7	2.1/3.0	2.9/3.6
	Tap Loss	9.3/9.9	9.2/9.7	9.1/9.9	9.1/10.1	9.1/10.3	10.0/11.2
SSP-12Q	Output	1.1/1.5	1.3/1.7	1.4/2.0	1.5/2.2	1.6/2.4	2.2/3.0
	Tap Loss	11.7/12.8	11.4/12.5	11.4/12.5	11.5/12.8	11.6/13.2	11.9/13.6
SSP-16Q	Output	0.9/1.3	1.0/1.5	1.0/1.7	1.1/1.9	1.3/2.2	1.9/2.8
	Tap Loss	15.7/16.8	15.4/16.5	15.3/16.5	15.4/16.7	15.5/16.9	15.9/17.3
SSP-3-636Q	J1-J2	7.2/7.9	7.5/8.2	7.5/8.5	7.6/9.0	7.7/9.6	8.8/11.0
	J1-J3	7.2/7.9	7.5/8.2	7.5/8.5	7.6/9.0	7.7/9.6	8.8/11.0
	J1-J4	3.9/4.6	4.0/4.5	4.1/4.7	4.2/4.9	4.2/5.3	4.4/5.7

SPECIFICATIONS ISOLATION (dB Minimum)

Isolation (dB)	5–10 MHz	11–600 MHz	601–750 MHz	751–850 MHz	851–1000 MHz	1001–1218 MHz
SSP-PIQ and SSP-PIQ/SP	60	70	65	60	60	57
SSP-3Q	15	20	20	20	20	20
SSP-7Q	15	20	20	20	20	20
SSP-9Q	15	20	20	20	20	20
SSP-12Q	15	20	20	20	20	20
SSP-16Q	15	24	24	22	20	20
SSP-3-636Q	15	20	20	20	20	20

SPECIFICATIONS RETURN LOSS (dB Minimum)

Return Loss (dB)	5-50 MHz	51-150 MHz	151-450 MHz	451-750 MHz	751-850 MHz	851-1000 MHz	1001–1218 MHz
SSP-PIQ	15	18	18	18	16	16	16
SSP-PIQ/SP	15	18	18	18	16	16	16
SSP-3Q	15	17	17	17	16	16	16
SSP-7Q	15	16	16	18	16	16	16
SSP-9Q	15	16	16	18	16	16	16
SSP-12Q	15	16	17	18	16	16	16
SSP-16Q	15	17	18	18	16	16	16
SSP-3-636Q	15	17	17	17	16	16	16

GENERAL SPECIFICATIONS

Characteristics	Specifications
Current Handling (Splitters and Directional Couplers)	15 amperes maximum all ports
Current Handling (Power Inserter)	
AC Ports	20 amperes maximum
RF Ports	15 amperes maximum
SSP-PIQ/SP Surge Protection	
Surge Current Rating	3000 A, 8x20 μ S
Minimum Firing Voltage	180 V
Hum Modulation	5–10 MHz: 60 dB minimum, all models except PI and PI/SP
	5–10 MHz: 50 dB minimum, PI and PI/SP
	11–750 MHz: 60 dB minimum
	751–1000 MHz: 53 dB minimum
	1001–1218 MHz: 50 dB minimum
RFI	100 dB minimum
Flatness	\pm 0.4 dB maximum on thru port (versus cable) except SSP-3Q and SSP-3-636Q
	\pm 0.5 dB maximum SSP-3Q and SSP-3-636Q thru ports (versus cable)
	\pm 0.8 dB maximum on COUPLED port (versus cable)
Dimensions	5.53 x 5.53 x 2.50 inches (14.0 x 14.0 x 6.35 cm)
Weight	1.67 lbs. (0.76 kg)

RELATED PRODUCTS

FFT Full Feature Taps	Optical Patch Cords
FFE Feederline Equalizers	Optical Passives
CHP Chassis	Installation Services

SSP-Q series configuration options are described in the table below. Ordering information is provided in the table that follows.

SSP-Q CONFIGURATION OPTIONS

Model Name	Description	Port Configurations
SSP-3Q	This is a symmetrical splitter that divides the RF signal into two branches of equal amplitude.	Input (RF/AC) Output (RF/AC) Output (RF/AC)
SSP-*Q	These directional couplers are available with tap losses of 7 dB, 9 dB, 12 dB, or 16 dB and are used when signal amplitudes of unequal outputs are preferred.	Input (RF/AC) Output (RF/AC) Tap Output (RF/AC)
SSP-3-636Q	This is the only splitter that provides three outputs: one output is attenuated by 3 dB, while the other two are attenuated by 6 dB each.	Input (RF/AC) Output (RF/AC) Output (RF/AC) Output (RF/AC)
SSP-PIQ	This power inserter is used to add 60 Vac to 90 Vac to the cable system. It can accommodate 15 A continuous on each leg and 20 amps in common.	Input/output (RF/AC) Input/output (RF/AC) Output (AC) Output (AC)
SSP-PIQ/SP	This power inserter adds an additional 3000 amps of current surge protection to the entire system.	Input/output (RF/AC) Input/output (RF/AC) Output (AC) Output (AC)

SSP-Q ORDERING INFORMATION

Complete Passive Part Number	Model Name	Faceplate Only Part Number	Model Name
594947-001-00	SSP-PIQ	596229-001-00	SSP-PIQ/U
594947-002-00	SSP-3Q	596229-002-00	SSP-3Q/U
594947-003-00	SSP-7Q	596229-003-00	SSP-7Q/U
594947-004-00	SSP-9Q	596229-004-00	SSP-9Q/U
594947-005-00	SSP-12Q	596229-005-00	SSP-12Q/U
594947-006-00	SSP-16Q	596229-006-00	SSP-16Q/U
594947-007-00	SSP-3-636Q	596229-007-00	SSP-3-636Q/U
594947-008-00	SSP-PIQ/SP	596229-008-00	SSP-PIQ/SP/U

Note: Specifications are subject to change without notice.

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