



DROP PASSIVES



INTERCONNECT PRODUCTS



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INTELLIGENT TAPS



CommScope Signal Vision® Product Catalog

- > Drop Passives
- > Subscriber Amplifiers
- > Interconnect Products
- > Intelligent Taps
- > Technical Information

We Thank You...

for your interest in CommScope® Signal Vision products. You are the reason we are a world leader in broadband products. Our catalog includes the products which you request most often. However, if you do not see the product that you need listed in this catalog, contact the sales representative in your area or contact our Customer Service Department.

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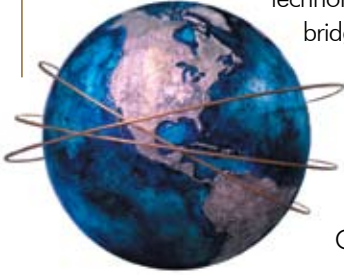
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Our Strategy Is Simple - Quality Products At Competitive Prices Delivered With Attentive, Personal Service

Advanced coax connections. Blazing fiber pipes. Reliable subscriber drop products. No wonder more broadband operators count on CommScope for quality HFC products than any other supplier. They share a common belief that when you make us your supplier you get a suite of services and products offered by only one company— the industry’s technology leader – CommScope. We bridge the gap between yesterday’s analog systems and next generation digital networks with products engineered specifically for each access point within a Hybrid Fiber Coax (HFC) topology.



Known for Exceptional Customer Service

CommScope is a solid business partner with an impressive service track record. Our professional account teams are aligned to respond quickly and efficiently. Our vast network of trained sales associates and distributors embody experience and professionalism combined with a commitment to finding the right solution for every customer.

Research & Development

CommScope is dedicated to innovation. Our engineers participate in industry standards groups and critical committees. Bringing to market the most comprehensive choice of quality solutions remains a primary focus. Our products meet the requirements of existing electronics, yet empower service providers like you to push the limits of services offered by means of scalable architecture and optimal throughput.

Unparalleled Quality and Innovation

With over 1,300 patents, we offer thousands of cable, conduit, components and connectivity options. With more than 30 years experience, every product features details manufactured to exacting standards. Only high quality materials and products manufactured within tight tolerances are worthy of bearing the CommScope name. Production operations located on 5 continents produce high performance solutions selling into more than 130 countries.

Experienced Technical Staff

Our customer commitment extends to strong field and lab support coupled with installation training materials offered in both English and Spanish. Tap into CommScope’s deep knowledge base and support provided at no additional cost. You will also find a wide array of technical documents, white papers and software online at www.commscope.com



Strong Industry Involvement

CommScope has long been a supporter of broadband industry trade associations. We exhibit in many industry-tradeshows which demonstrates our commitment to educating our customer base and bring to market new product enhancements and solutions that complement our core product portfolio.



**Cable Transport® –
The Cable Industry’s Truck Fleet**

CommScope efficiently and affordably delivers or moves inventory with impressive on-time delivery performance and reliable 24-hour disaster recovery response.

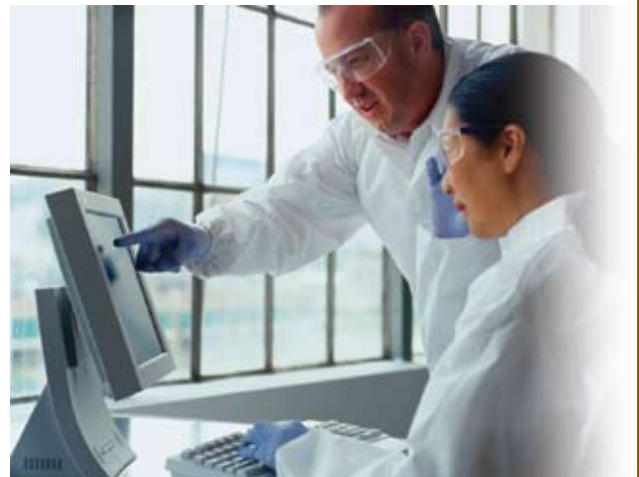


Key Customer Service Contact Numbers

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 Telephone 828-324-2200
 Domestic Fax 828-328-3400
 International Fax..... 828-323-4989
 Email custserv@commscope.com

AIM® – Advantage Inventory Management

This collaborative planning, forecasting and supply replenishment tool adds value and helps manage inventory more effectively. A customized solution, which is easy to implement, AIM improves inventory turns and reduces costs through the use of simple bar-coding technology. This unique program further enhances CommScope’s reputation for offering the highest standards of customer service.



Please Note: The products mentioned within this catalog are by no means comprehensive. To request more information on any CommScope product or service, please contact your sales representative or call CommScope’s Customer Service Center at 1-800-982-1708.

Premium Subscriber Drop Products

CommScope proudly offers Signal Vision's family of technically advanced subscriber amplifiers, splitters, intelligent taps, grounding products and locking terminators.

Signal Vision products are a natural complement to our core cable and conduit products. This portfolio honors CommScope's ongoing commitment to superior HFC performance and reliability. Signal Vision's high quality products are engineered to SCTE standards and are backed by a 5-year warranty and a 30-year history of reliability. A generous stocking program ensures immediate delivery of most products.



Subscriber Amplifiers – Including NEW VoIP Amplifier

- Excellent performance and reliability with ultra low-noise signal amplification and 6kV surge protection
- Space saving miniature package
- Unique positive tilt compensates for higher attenuation at higher frequencies
- Patent pending VoIP bypass amplifier preserves lifeline telephony service in the event of power failure
- Amplifiers are available in 1, 2, 4 and 8-port configurations



Drop Passives – Superior Performance to 1 GHz

- Innovative four-sided center conductor contact provides superior retention and electrical performance
- Flat-end ports for proper ground plane match
 - Better than 120 dB RFI
 - Two layers of protection against corrosion



Intelligent Taps – A New Approach, A Better Solution

- Execute services immediately without generating a truck roll
- Select filtering options to manage reverse path noise
- Compatible with industry standard billing systems
- Telephone filter for 911 service
- Favorable payback



Interconnect Products - Locking Terminators, Ground Blocks and F-81s

- Nickel plated brass locking terminator with 35 dB return loss, compatible with GTT-type tools
- Industry-leading F-81s and ground blocks with unique, patented ground clamp



The idea and concept of a 360° contact is appealing, but is not feasible in the cable telecommunications world where feed-thru 75Ω connectors are utilized.

The first problem to overcome is the size variations of center conductors.

- Between series 59 coaxial cable and series 6 coaxial cable, center conductor sizes could vary from .031" to .042". Providing even contact pressure becomes extremely challenging when this size variation is involved in fitting a round tube-type contact over a round center conductor.

Add to this the effect of cutting the center conductor, which can be solid copper or copper clad steel.

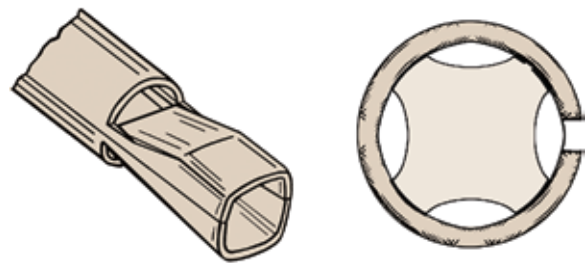
- This cutting always destroys the conical end (see photo). The two outcroppings on each side become the contact points within the round contact. This also diminishes the electrical performance of the contact.



(Effects on center conductor when cut by a pair of diagonals)

Tests have shown two things:

1. A conical contact when tested using a machined mating contact showed a Return Loss of 31 dB. The same contact when using first type 6 cable then F59 cable showed results ranging from 23 to 28 dB.
2. The pullout (contact pressure) changes dramatically when series 6 coaxial cable is followed by a series 59 coaxial cable center conductor. The change seen in testing can be as much as 50%. While many manufacturers claim to use conical contacts (360°), with closer inspection what is usually found to be true is that on the inside of the round contact is a spring that is used to vary conductor size. These springs vary in design for 2 to 4 points or dimples in the contact wall to wave springs offering less contact and more impedance transfer than necessary (see example drawing).



It is recommended that when offered a 360° contact, the utilization of a good, high-powered magnifying glass and a Return Loss test using field-prepped center conductors will yield a true picture of how the product actually functions, and the electrical parameters that will be available in field use.

**Features**

- Innovative four-sided center conductor contact provides superior retention and electrical performance
- 6kV ring wave surge protection on all ports
- 40 dB port-to-port isolation in the return band
- Flat-end ports for proper ground plane match
- Better than 120 dB RFI protection
- Two layers of protection against corrosion
- Also available in power passing, mini and wall mount versions

Ordering Information

SV-2G	Splitter, 2-Way
SV-3G	Splitter, 3-Way
SV-3BG	Splitter, 3-Way Balanced
SV-4G	Splitter, 4-Way
SV-8G	Splitter, 8-Way

**SV-2G**
2-Way Splitter**SV-3G**
3-Way Splitter**SV-3BG**
3-Way Balanced Splitter**SV-4G**
4-Way Splitter**SV-8G**
8-Way Splitter

Meets or exceeds: SCTE IPS-SP-206/IEEE C 62-41 A3 (Ring Wave)



Universal Specifications

Bandwidth	5-1000 MHz
Operating Temperature Range	-40° F to +140° F
RFI	120 dB min.
Surge Protection	IEEE Category A3 (6000V, 200Amp, Ring Wave)
Spurious Signals and 2nd Order Harmonics	<-60 dBmV
Frequency Response	± 0.3 dB (8-way: ± 0.4 dB)

Product Line Specifications

	SV-2G	SV-3G	SV-3BG	SV-4G	SV-8G
Insertion Loss (maximum)					
5-450 MHz	3.5 dB	3.5/7.0 dB	5.4 dB	6.8 dB	10.5 dB
450-1000 MHz	3.7 dB	3.7/7.8 dB	6.1 dB	7.6 dB	11.5 dB
Return Loss (minimum)					
5-45 MHz	25 dB	25 dB	25 dB	25 dB	25 dB
50-1000 MHz	22 dB	22 dB	22 dB	22 dB	22 dB
Isolation (minimum)					
15-45 MHz	40 dB	40 dB	40 dB	40 dB	35 dB
50-300 MHz	35 dB	35 dB	35 dB	35 dB	30 dB
300-1000 MHz	30 dB	30 dB	30 dB	30 dB	30 dB

Specifications subject to change without notice

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**Features**

- Innovative four-sided center conductor contact provides superior retention and electrical performance
- 6kV ring wave surge protection on all ports
- 40 dB port-to-port isolation in the return band
- Flat-end ports for proper ground plane match
- Better than 120 dB RFI protection
- Two layers of protection against corrosion
- Also available in power passing, mini and wall mount versions

Ordering Information

SV-V2G	Vertical Splitter, 2-Way
SV-V3G	Vertical Splitter, 3-Way
SV-V4G	Vertical Splitter, 4-Way

**SV-V2G**
2-Way Splitter**SV-V3G**
3-Way Splitter**SV-V4G**
4-Way Splitter

Meets or exceeds: SCTE IPS-SP-206/IEEE C 62-41 A3 (Ring Wave)



Universal Specifications

Bandwidth	5-1000 MHz
Operating Temperature Range	-40° F to +140° F
Frequency Response	±0.3 dB
RFI	120 dB minimum
Surge Protection	IEEE Category A3 (6000V, 200Amp, Ring Wave)
Spurious Signals and 2nd Order Harmonics	<-60 dBmV

Product Line Specifications

	SV-V2G	SV-V3G	SV-V4G
Insertion Loss (maximum)			
5-550 MHz (1 port)	3.6 dB	3.6/7.2 dB	7.2 dB
550-1000 MHz (1 port)	4.0 dB	4.0/8.0 dB	8.0 dB
Return Loss (minimum)			
5-45 MHz	22 dB	22 dB	22 dB
50-1000 MHz	22 dB	22 dB	22 dB
Isolation* (minimum)			
15-45 MHz	40 dB	40 dB	40 dB
50-300 MHz	35 dB	35 dB	35 dB
300-1000 MHz	30 dB	30 dB	30 dB

*Utility Isolation - All ports meet same specifications

**Features**

- Built-in ground block
- Utilizes surface mount technology
- Intermod protected
- Bright tin plating over copper flash
- Flat-end ports
- Four sided dual spring contact
- Solder sealed backplate
- No casting lines on ports

Ordering Information

SV-DCxxG	Horizontal Directional Coupler
SV-DCWxxG	Vertical Directional Coupler

xx represents dB value

Options include 6, 9, 12, 16, 20, 23, 26 dB values



SV-DCxxG
Horizontal Directional Coupler



SV-DCWxxG
Horizontal Directional Coupler

Meets or exceeds: SCTE IPS-SP-206/IEEE C 62-41 A3 (Ring Wave)



Universal Specifications

Bandwidth	5-1000 MHz
Operating Temperature Range	-40° F to +140° F
Return Loss	22 dB minimum
RFI	120 dB minimum
Surge Protection	IEEE Category A3 (6000V, 200Amp, Ring Wave)
Spurious Signals and 2nd Order Harmonics	<-60 dBmV

Product Line Specifications

	6 dB	9 dB	12 dB	16 dB	20 dB	23 dB	26 dB
Insertion Loss (maximum)	2.5 dB	2.2 dB	1.2 dB	1.0 dB	1.0 dB	.85 dB	.85 dB
Isolation (minimum)							
15-40 MHz	35 dB	35 dB	35 dB	40 dB	40 dB	40 dB	40 dB
50-300 MHz	30 dB	30 dB	35 dB	35 dB	35 dB	35 dB	35 dB
300-1000 MHz	28 dB	30 dB	28 dB	30 dB	30 dB	30 dB	30 dB
Tap Response	±.75 dB	±.75 dB	±.75 dB	±.75 dB	±.75 dB	±1.0 dB	±1.0 dB

Specifications subject to change without notice

Features

- 6 kV surge protection (IEEE C-62-41-B3 on input, A3 on outputs)
- Space saving miniature package
- Unique positive tilt compensates for greater attenuation at higher frequencies
- Flat-end brass "F" ports with four-sided contacts
- Aluminum housing with baked enamel finish
- Neoprene moisture and mesh RFI gaskets
- All amps can be powered through output post with optional power inserter

Ordering Information

SV-A15PRSm*	Subscriber Amp, 15 dB, Mini, 1-Output
SV-A15PRSmS*	Subscriber Amp, 15 dB, Mini, All Ports Down, 1-Output
SV-A15-2PRSm*	Subscriber Amp, 15 dB gain, Mini, 2-Output
SV-A15-4PRS*	Subscriber Amp, 15 dB, 4-Output
SV-A15-8PRS*	Subscriber Amp, 15 dB, 8-Output
SV-A10RPFs*	Subscriber Amp, 10 dB, Reverse Gain Only
SV-PI	Power Inserter

*Add "I" to include power inserter



SV-A15-PRSmS
1-Port Mini Subscriber Amplifier

SV-A15-PRSm
1-Port Mini Subscriber Amplifier



SV-A15-2PRSm
2-Port Mini Subscriber Amplifier



SV-A15-4PRS
4-Port Subscriber Amplifier



SV-A15-8PRS
8-Port Subscriber Amplifier



SV-A10-RPFS
1-Port Reverse Subscriber Amplifier



SV-PI
Power Inserter

Universal Specifications

Bandwidth	5-42 MHz Reverse, 52-1000 MHz Forward
Operating Temperature Range	-40° F to +140° F
RFI	100 dB minimum
Surge Protection	IEEE C-62-41-B3 on input, A3 on outputs
Response Flatness	Forward: ± 0.75 dB Reverse: ± 0.5 dB
Distortion Performance	C/N: 70 dB minimum, 112 ch. loading CSO: -65 dB minimum, 112 ch. loading CTB: -80 dB minimum, 112 ch. loading Group Delay: 20 nSec maximum @ ch. 2 (3.58 MHz span) 5 nSec maximum @ ch. 6 (3.58 MHz span)
Isolation	Power/RF Out: 60 dB minimum (5-1000 MHz) Out/Out: 25 dB minimum (5-1000 MHz)
Hum Modulation	-85 dB minimum
Cross Modulation	-75 dB minimum
Powering Requirements	12 VDC/200 mA
AC/DC Power Supply	UL certified, surge protected

Product Line Specifications

	SV-A15PRSm SV-A15PRSmS	SV-A152PRSm	SV-A15-4PRS	SV-A15-8PRS	SV-A10-RPFS
Gain					
Forward	15 dB	11 dB	7 dB	3 dB	N/A
Reverse	N/A	N/A	N/A	N/A	10 dB
Noise Figure (maximum at 1 GHz)	3.5 dB	4.5 dB	5.0 dB	5.0 dB	6.0 dB
Return Loss (minimum with 116 channel loading)					
Forward	22 dB	22 dB	22 dB	22 dB	22 dB
Reverse	21 dB	21 dB	21 dB	21 dB	22 dB
Return Path Insertion Loss (max)	1.2 dB	4.5 dB	8 dB	11.5 dB	1.5 dB

Specifications subject to change without notice

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Features

- Non-interruptible VoIP port preserves lifeline telephony service in the event of a power failure
- 6 kV surge protection (IEEE C-62-41-B3 on input, A3 on outputs)
- Unique positive tilt compensates for greater attenuation at higher frequencies
- Flat-end brass "F" ports with four-sided contacts
- Aluminum housing with baked enamel finish
- Neoprene moisture and mesh RFI gaskets
- All amps can be powered through output post with optional power inserter

Ordering Information

SV-A152PRSV*	VoIP Amplifier, 15 dB gain, 2-Output
SV-A154PRSV*	VoIP Amplifier, 15 dB gain, 4-Output
SV-A10RFPSV*	VoIP Amplifier, 10 dB gain, Reverse Gain Only
SV-PI	Power Inserter

*Add "I" to include power inserter



SV-A15-2PRSV
2-Way, 2-Port Subscriber Amplifier



SV-A15-4PRSV
4-Port VoIP Amplifier



SV-PI
Power Inserter



SV-A10-RFPSV
Reverse VoIP Amplifier

*Patent Pending



Universal Specifications

Bandwidth	5-42 MHz Reverse, 52-1000 MHz Forward
Operating Temperature Range	-40° F to +140° F
RFI	100 dB minimum
Surge Protection	IEEE C-62-41-B3 on input, A3 on outputs
Response Flatness	Forward: ± 0.75 dB Reverse: ± 0.5 dB
Distortion Performance	C/N: 70 dB minimum, 112 ch. loading CSO: -65 dB minimum, 112 ch. loading CTB: -80 dB minimum, 112 ch. loading Group Delay: 20 nSec maximum @ ch. 2 (3.58 MHz span) 5 nSec maximum @ ch. 6 (3.58 MHz span)
Isolation	Power/RF Out: 60 dB minimum (5-1000 MHz) Out/Out: 25 dB minimum (5-1000 MHz)
Hum Modulation	-85 dB minimum
Cross Modulation	-75 dB minimum
Powering Requirements	12 VDC/200 mA
AC/DC Power Supply	UL certified, surge protected

Product Line Specifications

	SV-A152PRSV	SV-A154PRSV	SV-A10-RPFSV
Gain			
Forward	11 dB	7 dB	N/A
Reverse	N/A	N/A	10 dB
Noise Figure (maximum at 1 GHz)	4.0 dB	4.5 dB	5.0 dB
Return Loss (minimum with 116 channel loading)			
Forward	20 dB	20 dB	20 dB
Reverse	20 dB	20 dB	20 dB
Return Path Insertion Loss (maximum)			
RF Ports	4.5 dB	8.0 dB	X dB
VoIP Port	4.5 dB	8.5 dB	X dB
VoIP Port (bypass mode)	1.0 dB	1.0 dB	1.0 dB

Specifications subject to change without notice

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Features

- Pressure forged from brass with nickel plating. Brass is a material recommended by the N.E.C. that is galvanically compatible to interface with ground wire (copper) and “F” connectors (brass)
- Superior one-piece design integrates premium barrel splice with body
- Unique split bolt type ground (bond) clamp, which seizes without damaging the ground wire
- Increased ground surface contact of greater than .500”
- Patented 4-sided, diamond shaped contact that has 250 grams of pressure that can accommodate all types of cable from F59 through F7 without damaging the center conductor
- Improved ground plane with flat “F” port interface surfaces
- Sealing surfaces accommodate “F” boots, sealing rings and shrink tubing
- Return Loss specification 35 dB minimum
- UL approved
- Also available in dual configuration

Electrical Specifications

Bandwidth	5-1000 MHz
Return Loss	35 dB minimum
Insertion Loss	0.2 dB maximum
Ingress Shielding	120 dB



SV-GB-1G
1 GHz Ground Block



SV-GB-1GD
1 GHz Dual Ground Block



Features

- Meets IEEE C62-41-B3 combination wave surge protection
- Certified to meet ANSI/SCTE 81-2003 specifications
- Pressure forged from brass with nickel plating. Brass is a material recommended by the N.E.C. that is galvanically compatible to interface with ground wire (copper) and "F" connectors (brass)
- Superior one-piece design integrates premium barrel splice with body
- Unique split bolt type ground (bond) clamp, which seizes without damaging the ground wire
- Increased ground surface contact of greater than .500"
- Patented multi-sided radial contact with 250 grams of pressure that can accommodate all types of cable from F59 through F7 without damaging the center conductor
- Ground plane with flat "F" port interface surfaces
- UL Approved



SV-GB-SP
1 GHz Surge Protected Ground Block

Electrical Specifications

Bandwidth	5-1000 MHz
Return Loss	30 dB minimum
Insertion Loss	0.3 dB maximum
Ingress Shielding	120 dB

Surge Suppression Specifications

Current Suppression	3000 amps.
Voltage Resistance	6000 volts
Insulation Resistance	>100 megohms
Operating Temperature	-40°F to +150°F



Features

- Constructed from brass with bright tin plating. This combination provides the optimum interface between male and female "F" type fittings
- Patented 4-sided, diamond shaped contact that has 250 grams of pressure that can accommodate all types of cable from F59 through F7 without damaging the center conductor
- Ground plane with flat "F" port interface surfaces
- Sealing surfaces to accommodate "F" boots, sealing rings and shrink tubing
- Enhanced return loss specification of 35 dB
- Available pre-installed in a wall plate or with nut and washer

Electrical Specifications

Bandwidth	5-1000 MHz	
Return Loss	35 dB minimum	
Insertion Loss	0.02 dB maximum	
Ingress Shielding	120 dB	
Length	SV-F81-GA	1.11"
	SV-F81-GAC	1.04"



SV-F81-GA
Barrel Splice
(for use with boots or ring seals)



SV-F81-GAC
Barrel Splice

Wall Plates

Features

- Single port wall plate with F-81 splice barrel attached
- Single gang, flush mount
- High impact ABS plastic
- Available in ivory or white
- Available with barrel splice installed



SV-WPI-F81GA
(ivory)



SV-WPW-F81GA
(white)



Features

- Constructed from solid brass with nickel plating
- Secure – capacitor added to handle any AC/DC currents that might be in the circuit (model SV-LT)
- Enhanced return loss specification of 35 dB minimum due to the use of high carbon film resistors and a tuned cylinder
- Improved, ground is hard soldered, which eliminates the loss of ground plane (ingress) and common path distortion problems
- Simple to use, installed with GTT type tool



SV-LT
1 GHz Locking Terminator

Electrical Specifications

Bandwidth	5-1000 MHz
Return Loss	35 dB minimum
Contact Pin Size	0.032" ± .002"



SV-PL
1 GHz Port Lock



SV-LTA
1 GHz Locking Terminator

Features

- Same features as the SV-LT without capacitor or resistor

Features

- Space saving, new compact size
- Same features as the SV-LT without the capacitor

Tools

Features

- Use with all Signal Vision locking terminators
- Features solid spring steel ears
- Available in 4" (SV-GTT4) and 7" (SV-GTT7-1)
- Durable, long lasting, and easy to use



SV-GTT4



SV-GTT7-1

Specifications subject to change without notice

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○ The vast majority of locking terminators manufactured prior to 1994 had the same problems. The ground used was a constant tension spring, which was typically manufactured using a material not galvanically matched to the device to which it was grounded. With the presence of an electrolyte and a power source, these springs would become isolated which caused two problems:

1. The contact area of the ground would be breached by loss of spring tension or constant vibration causing the resistor lead to become a receive/transmit antenna, which would allow the device to become an ingress/egress potential
2. The contact area of the ground-spring created a non-linear junction, formed by two dissimilar metal conductors that do not make intimate metal-to-metal contact. This would result in a layer of oxide or corrosion between the two contacts. This corrosion forms a mixing diode and creates a beat product on 6 MHz centers on the forward plant Common Path Distortion (CPD).

In 1990, Signal Vision designed a family of products specifically addressing these two problems. First, we chose brass as our base metal to eliminate dissimilar metal problems within the tap port interface. Second, we used high carbon film resistors and a tuned cylinder to enhance the return loss of this product. We raised the Return Loss specification from an industry average of 16 dB to a minimum of 30 dB. Third, we added a capacitor to handle any AC/DC currents that might be in the circuit, and hard soldered the ground, which eliminated both the loss of ground plane, or ingress, and CPD problems.



**Model SV-LT and SV-LTA
Locking Terminator**

○ Why Use Locking Terminators?

1. Security of service and protection against theft.
2. All products are manufactured to be either terminated or under load when the Radio Frequency (RF) parameters are designed. An electrical device left with an un-terminated port will have an internal electrical mismatch (Return Loss). This mismatch will reduce Return Loss by as much as 75% depending on the design of the components, and isolation characteristics.
3. Response flatness of the through line will vary depending on the isolation limits of the individual circuits, i.e., an 11 dB 4-port tap will vary from 2 to 4 dB peak-to-valley when unused ports are left open.
4. Tap Port Flatness (Drop Response)
If tap ports are left un-terminated on low value taps, the individual drop will have a degraded response (peak-to-valley), i.e., an 11 dB tap without terminators will have a 2 dB peak-to-valley on drop response vs. .07 dB if unused ports are terminated.
5. Ingress/Egress
Although difficult to determine via testing, common engineering theory says that all metals expand and contract and that all springs change with age and conditions. If this axiom is true, an un-terminated "F"-port will eventually become an RF leakage problem.



Stop driving your costs up when the answer is just a click away

Signal Vision’s advanced Intelligent Tap allows operators to service customers instantaneously. No more expensive truck rolls, frustrating ingress troubleshooting or lost revenue. Tiering options allow minimum noise funneling in the return path and help manage potential ingress in 2-way systems, all at the click of a button. Reversible plug-in directional couplers allow flexibility in your system designs, and minimize inventory costs.

Features

- The intelligent addressable solution
 - Remote:
 - RF on/off
 - High pass filtering (ingress control)
 - Reverse window filtering (ingress control in systems with STB)
- Telephony capable power passing “F” ports
- Non-interruptible design
- Compatible with industry standard billing systems
- Extended 9” housing for cost effective installations/upgrades (No need for extension connectors)
- Flexible and upgradeable design
- Reversible plug-in directional couplers
- Full 1 GHz performance



SV-AT
Versatile Intelligent Tap System

Available Models

SV-4ADT	4-Port Basic Intelligent Tap
SV-8ADT	8-Port Basic Intelligent Tap
SV-4ADT-F	4-Port Intelligent Tap with Return Filter
SV-8ADT-F	8-Port Intelligent Tap with Return Filter
SV-4ADT-T	4-Port Intelligent Tap with Telephony Faceplate
SV-8ADT-T	8-Port Intelligent Tap with Telephony Faceplate
SV-4ADT-FT	4-Port Intelligent Tap with Telephony Faceplate and Return Filter
SV-8ADT-FT	8-Port Intelligent Tap with Telephony Faceplate and Return Filter



Specifications

4-W Insertion Loss Table

Tap Value	40 MHz	750 MHz	860 MHz	1000MHz	Plug-In DC Value
11 dB	-	-	-	-	0
14 dB	3.2	4.9	5.2	5.4	3 dB
17 dB	2.3	3.2	3.6	3.9	6 dB
20 dB	1.5	2.4	2.6	2.8	9 dB
23 dB	1.1	2.0	2.2	2.4	12 dB
26-29 dB	1.0	1.7	1.9	2.2	15,18 dB

8-W Insertion Loss Table

Tap Value	40 MHz	750 MHz	860 MHz	1000MHz	Plug-In DC Value
14 dB	-	-	-	-	0 dB
17 dB	3.2	4.9	5.2	5.4	3 dB
20 dB	2.3	3.2	3.6	3.9	6 dB
23 dB	1.5	2.3	2.4	2.6	9 dB
26 dB	1.1	2.0	2.0	2.3	12 dB
29 dB	1.0	1.7	1.9	2.2	15 dB

Tiering Mode	Frequency	Tap Port Loss Addition (dB)	Note
Pass Thru	5-1000	2.7	
High Pass	5-42	40	42/51 split Others available on request
	51-54	2.4	
	54-1000	2.6	
Reverse Window	5-12	30	15-18/51 split Others available on request
	15-18	5.0	
	21-42	30	
	51-54	2.4	
	54-1000	2.6	
OFF	5-1000	50 minimum	

Operating Temperature	-40°F to +140°F
Current Passing	15 amps, 40-90 VAC (In-Out) 350 mA (tap ports) maximum (limited)
Surge Protection	
In/Out Ports	IEEE C62.41-1991, category B3 6 kV
Tap Ports	IEEE C62.41-1991, category A3 6 kV
Through HUM Modulation	70 dB (average)@10A 65 dB (average)@12A 60 dB (average)@15A
Mechanical Dimensions:	9x4.72x3.62 (inches)

Communications	FSK 19.2kbps, 102.2 MHz crystal controlled (Custom frequency available on request) (200kHz wide)
Power Consumption	24 mA @60 VAC 29 mA @90 VAC

Electrical Specifications

Return Loss	In-Out	20 dB minimum
Return Loss	Tap Port	20 dB minimum
Isolation	Port to Port	25 dB minimum
Isolation	Out to Port	10 dB + tap value, 30 dB maximum (11 dB tap = 21 dB) @ 1 GHz

Specifications subject to change without notice

Features

- The intelligent addressable solution
 - Remote RF on/off
 - Remote high pass filtering (ingress control)
- 16 port compact design
- Non-interruptible design
- Reversible plug-in directional couplers
- Full 1 GHz performance
- Optional DC powering available
- Standard coaxial connections
- Weather and EMI sealed housing
- Compatible with industry standard billing systems

Available Models

SV-16ADT	16-Port Basic Intelligent Tap
SV-16ADT-F	16-Port Intelligent Tap with Return Filter



SV-ADT
Versatile Addressable Tap System

Specifications
16-W Insertion Loss Table

Tap Value	40 MHz	750 MHz	860 MHz	1000MHz	Plug-In DC Value
23dB	–	–	–	–	0
26 dB	3.1	4.9	5.2	5.4	3 dB
29 dB	3.1	4.0	4.6	4.9	6 dB

Tiering Mode	Frequency	Tap Port Loss Addition (dB)
Pass Thru	5-1000	2.7
	5-42	40
High Pass	51-54	2.4
	54-1000	2.6
	15-18	5.0
	21-42	30
	51-54	2.4
	54-1000	2.6
OFF	5-1000	50 minimum

Operating Temperature	-40°F to +140°F
Current Passing	15 amps, 40-90 VAC (In-Out) 350 mA (tap ports) maximum (limited)
Surge Protection	
In/Out Ports	IEEE C62.41-1991, category B3 6 kV
Tap Ports	IEEE C62.41-1991, category A3 6 kV
Through HUM Modulation	70 dB (average)@10A 65 dB (average)@12A 60 dB (average)@15A
Mechanical Dimensions	9x4.72x3.62 (inches)
Communications	FSK 19.2kbps, 102.2 MHz crystal controlled (Custom frequency available on request) (200kHz wide)
Power Consumption	18 mA @60 VAC 22 mA @90 VAC

Electrical Specifications

Return Loss	In-Out	18 dB minimum
Return Loss	Tap Port	18 dB minimum
Isolation	Port to Port	25 dB minimum
Isolation	Out to Port	10 dB + tap value, 30 dB maximum (11 dB tap = 21 dB) @ 1 GHz

Specifications subject to change without notice

The SV-ADTC is a high quality FSK transmitter that converts RS-232 serial data to RF out. 2 Independent Serial Data to FSK transmitters are available in 1RU package for controlling the SV-ADT intelligent taps in the CATV plant.



SV-ADTC
Intelligent Tap Gateway

Features

- 2 independent serial data to FSK transmitters in 1RU package
- Adjustable level
- Output test point
- Very cost effective

Specifications

Parameter	Specifications	Notes
FSK TX Frequency	73 MHz, or 71.75MHz	Factory configured
Output Level	40-51 dBmV	Un-modulated
Adjustment range	11 dB	
Frequency Accuracy	+/- 10 kHz	
FSK Frequency Deviation	+/- 67 kHz	
Spectral Bandwidth	400 kHz (+/-200kHz) @-100dBc/Hz	
RS-232 serial port settings	9600-8-N-1	
RF Test Point	-20dB +/- 1dB	
AC Power In	120VAC, 230VAC 50/60Hz	
Temperature Range	0-50C	
Dimensions	19x10x1.7 (inches)	
Order Model Number	Frequency	
SV-ADTC-1	Customer Specified	

Specifications subject to change without notice



Inline Attenuators

Features

- Constructed from solid brass with bright tin plating
- Patented 4-sided, diamond shaped contact that has 250 grams of pressure that can accommodate all types of cable from F59 through F7 without damaging the center conductor
- Metal glaze type resistors ensure attenuation accuracy within 5%
- One-piece design
- 0.032" ±.002" contact pin
- Female to male fittings
- Available in 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16 & 20 dB attenuations

Electrical Specifications

Bandwidth	DC-1000 MHz
Return Loss In	25 dB minimum
Return Loss Out	25 dB minimum
Insertion Loss	Value ± 0.5 dB max



SV-FAM
Inline Attenuators

Voltage Blocking Coupler

Features

- Blocks AC and DC currents (AC to 90V)
- Patented 4-sided, diamond shaped contact that has 250 grams of pressure that can accommodate all types of cable from F59 through F7 without damaging the center conductor
- Constructed from solid brass with bright tin plating
- One-piece design
- 0.032" ± .002" contact pin
- Female to male fittings

Electrical Specifications

Bandwidth	5-1000 MHz
Return Loss	30 dB minimum
Insertion Loss	0.5 dB maximum



SV-VBC-90
Voltage Blocking Coupler

Specifications subject to change without notice

Features

- New, inline body constructed from brass with nickel plating
- Patented 4-sided, diamond shaped contact that has 250 grams of pressure that can accommodate all types of cable from F59 through F7 without damaging the center conductor
- Improved ground plane with flat “F” port interface surfaces
- Designed with sealing surfaces to better accommodate “F” boots, sealing rings and shrink tubing
- Contact Pin O.D., 0.032” ± .002”
- IEEE C-62.41 A3 – surge compliant



SV-EQ
Inline Equalizer

Electrical Specifications

Bandwidth	5-1000 MHz
Return Loss	
5-1000 MHz	22 dB minimum
Insertion Loss	
@1000 MHz	0.6 dB maximum
Power Passing	600 mA AC
Hum Modulation	-60 dB minimum

Specifications subject to change without notice

Features

- All brass construction
- Spring loaded, Teflon protected tip
Ensures accurate and safe measurements
- Fits 5/8" entry ports
- RF -20 dB
- AC blocked

Electrical Specifications

Insertion Loss	20 dB (+ 1 dB)
Return Loss	18 dB minimum
Shield Effectiveness	-100 dB minimum



SV-05
Test Probe

AC/RF Bypass Probe

Features

- All brass construction
- Spring loaded, Teflon protected tip
Ensures accurate and safe measurements
- Fits 5/8" entry ports
- Passes AC/RF

Electrical Specifications

Insertion Loss	2.5 dB maximum
Return Loss	18 dB minimum
A.C. Thru Resistance	Minimal
A.C. Current Capacity	7 amps @ 90VAC for 15 min.
Shield Effectiveness	-100 dB min.
Hum Modulation	-65 dB @ 5 MHz, 6 amps.



SV-03
AC/RF Bypass Probe

Also Available in a Kit for Tap Bypass Applications

Kit Includes:

- 2 ea SV-03 adaptors
- 1 ea SV-J36PQF jumper
- 1 ea PF-59 push-on fitting



SV-03 Kit



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