

The KUSA SL-8 Paraslot UHF-TV antenna is a high performance slot array offering excellent performance in UHF-TV transmit applications requiring omnidirectional coverage. The SL-8 is available in single and multichannel models with a 1,000 watt power rating and optional null-fill.

KUSA's patented symmetrical parallel feed system is completely housed within the center of the antenna, and resists changes in radiation pattern caused by ice or snow buildup on the periphery of the antenna.

The standard SL-8 is a single-channel slot array with a power input rating of 1000 watts, VSWR of 1.1:1 maximum, 1.75 degrees of electrical beamtilt, and $\frac{7}{8}$ " EIA flange termination. Options include null-fill and additional beamtilt.

The SL-8-2 is designed for wideband performance over an 18 MHz bandwidth permitting multiple UHF-TV transmitters to be diplexed into a single antenna. The SL-8-2 provides VSWR of 1.15:1 or better across the specified channels.

The SL-8-3 is designed for wideband performance over a 30 MHz bandwidth. This arrangement allows multiple UHF-TV transmitters to be multiplexed into a single antenna. VSWR is held to 1.25:1 or better over the specified channels.



| Specifications: One UHF-TV Channel | | | | |
|---|------------|------------|------------|------------|
| Frequency range (MHz) | 470 to 548 | 548 to 674 | 674 to 788 | 788 to 806 |
| Maximum gain (dBd) | 11.4 | 11.4 | 11.4 | 11.4 |
| Power gain | 13.8 | 13.8 | 13.8 | 13.8 |
| VSWR | < 1.1:1 | < 1.1:1 | < 1.1:1 | < 1.1:1 |

| Specifications: One UHF-TV Channel with Null Fill | | | | |
|--|------------|------------|------------|------------|
| Frequency range (MHz) | 470 to 554 | 554 to 686 | 686 to 800 | 800 to 806 |
| Maximum gain (dBd) | 10.5 | 10.5 | 10.5 | 10.5 |
| Power gain | 11.22 | 11.22 | 11.22 | 11.22 |
| VSWR | < 1.1:1 | < 1.1:1 | < 1.1:1 | < 1.1:1 |

| Specifications: Two UHF-TV Channels (up to 18 MHz bandwidth) | | | | |
|---|----------------------|------------|------------|------------|
| Frequency range (MHz) | 470 to 554 | 542 to 680 | 668 to 794 | 782 to 806 |
| Maximum gain (dBd) | 10.5 | 10.5 | 10.5 | 10.5 |
| Power gain | 11.22 | 11.22 | 11.22 | 11.22 |
| VSWR | 18 MHz band < 1.15:1 | < 1.15:1 | < 1.15:1 | < 1.15:1 |

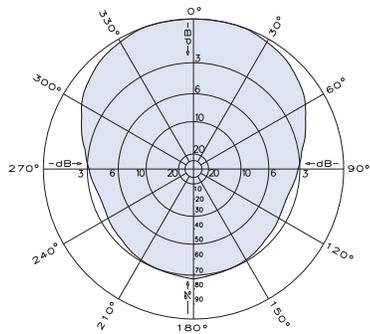
| Specifications: Three UHF-TV Channels (up to 30 MHz bandwidth) | | | | |
|---|----------------------|------------|------------|--|
| Frequency range (MHz) | 470 to 566 | 542 to 692 | 668 to 806 | |
| Maximum gain (dBd) | 10.5 | 10.5 | 10.5 | |
| Power gain | 11.22 | 11.22 | 11.22 | |
| VSWR | 30 MHz band < 1.25:1 | < 1.25:1 | < 1.25:1 | |

| Mechanical Specifications | | | | |
|----------------------------------|---|---|---|---|
| Weight | 95 lb (44 kg) | 75 lb (34 kg) | 65 lb (30 kg) | 35 lb (16 kg) |
| Height | 288 inches (7315 mm) | 240 inches (6096 mm) | 216 inches (5486 mm) | 180 inches (4572 mm) |
| Diameter | 4 inches (102 mm) | 3.5 inches (89 mm) | 2.875 inches (73 mm) | 2.375 inches (60 mm) |
| Wind load at 100 mph (161 kph) | Side 190 lbf (845 N) | 137 lbf (609 N) | 101 lbf (449 N) | 86 lbf (383 N) |
| Wind survival rating | 80 mph (129 kph) | 90 mph (145 kph) | 90 mph (145 kph) | 80 mph (129 kph) |
| Shipping dimensions | 302 x 9 x 7 inches (7671 x 229 x 178 mm) | 280 x 9 x 7 inches (7112 x 229 x 178 mm) | 254 x 9 x 7 inches (6452 x 229 x 178 mm) | 193 x 7 x 7 inches (4902 x 178 x 178 mm) |
| Shipping weight | 210 lb (96 kg) | 170 lb (78 kg) | 130 lb (59 kg) | 70 lb (32 kg) |

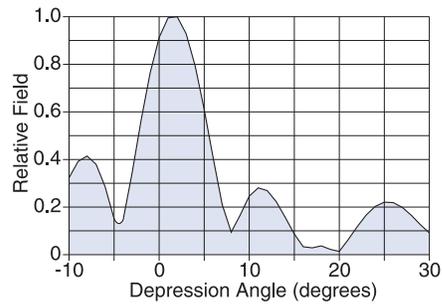
30060 subject to alteration

General Specifications

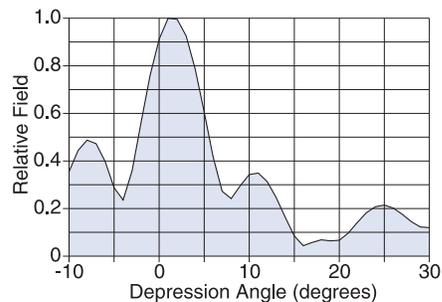
| | |
|---------------------|--|
| Frequency | 470—806 MHz |
| Impedance | 50 ohms |
| Polarization | Horizontal |
| Maximum input power | 1000 watts |
| Electrical beamtilt | 1.75 degrees standard (special beamtilt options are available) |
| Null fill | Optional |
| Connector | 7/8" EIA flange |
| Mounting | Mounting kits are available for attachment to a flat vertical surface or to masts with 2.375 to 4.5 inch (60 to 114 mm) OD.) |



Typical azimuth pattern
(E-plane)



Standard elevation pattern
(H-plane)

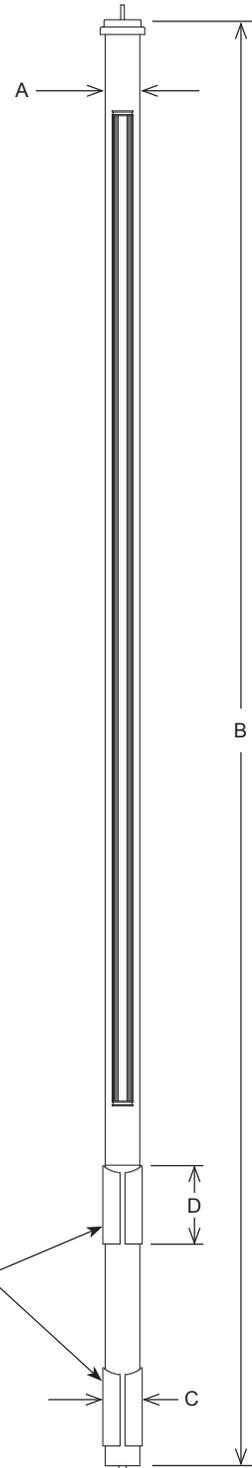
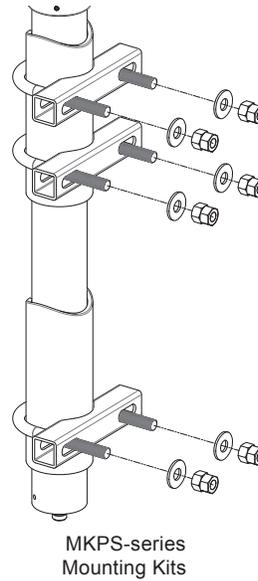


Typical elevation pattern
(H-plane) with null fill

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Mounting options

| Model | Description |
|--------------------|---|
| 788—806 MHz | |
| MKPS-13 | Mounting kit for mounting to a flat plate |
| MKPP-23* | Mounting kit for 2.375 to 3.5 inch (60 to 89 mm) OD mast. |
| MKPP-26* | Mounting kit for 2.375 to 5 inch (60 to 127 mm) OD mast. |
| MKGG-1 | Guy kit |
| MKSK-1 | Spreader kit |
| 674—788 MHz | |
| MKPS-14 | Mounting kit for mounting to a flat plate |
| MKPP-23* | Mounting kit for 2.375 to 3.5 inch (60 to 89 mm) OD mast. |
| MKPP-26* | Mounting kit for 2.375 to 5 inch (60 to 127 mm) OD mast. |
| MKGG-2 | Guy kit |
| MKSK-2 | Spreader kit |
| 548—674 MHz | |
| MKPS-15 | Mounting kit for mounting to a flat plate |
| MKPP-26* | Mounting kit for 2.375 to 5 inch (60 to 127 mm) OD mast. |
| MKGG-3 | Guy kit |
| MKSK-3 | Spreader kit |
| 470—548 MHz | |
| MKPS-16 | Mounting kit for mounting to a flat plate |
| MKPP-26* | Mounting kit for 2.375 to 5 inch (60 to 127 mm) OD mast. |
| MKGG-4 | Guy kit |
| MKSK-4 | Spreader kit |



*Pipe mounting kits for SL-8 antennas permit the installation of the antenna to a variety of pipe mast OD's. The range of OD is not intended to qualify those pipe support masts as being structurally adequate to support the antenna and in all cases, qualified structural engineering consultants should be engaged to design an adequate mount for all prevailing conditions at the installation site.

| A | B | C | D |
|----------------------|----------------------|----------------------|---------------------|
| 2.375 inches (60 mm) | 180 inches (4572 mm) | 2.875 inches (73 mm) | 7.9 inches (201 mm) |
| 2.875 inches (73 mm) | 216 inches (5486 mm) | 3.5 inches (89 mm) | 7.9 inches (201 mm) |
| 3.5 inches (89 mm) | 240 inches (6096 mm) | 4 inches (102 mm) | 7.9 inches (201 mm) |
| 4 inches (102 mm) | 288 inches (7315 mm) | 4.5 inches (114 mm) | 7.9 inches (201 mm) |

Antenna Guying

In order to provide maximum reliability and service life, KUSA recommends that the SL-8 antenna be guyed in cases where it is top mounted, free standing or subject to high winds.

An optional Guy Kit is available.

In cases where the antenna is side-mounted on the support structure, a brace can be used from the mounting structure to provide stability and strength to the installation.

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