

# AMPLIFIERS

# One Satellite HUBS

## SITUATION

A single DBS input is needed to be split to a large quantity of DBS multi-switches or receivers at a constant signal level.

## SOLUTION

SONORA distribution hubs amplify DBS signals using automatic gain control to provide a known constant level to multiple outputs.

## RELATED CONSIDERATIONS

Several mounting options are available at time of order: wall mount, rack mount with connectors forward or rack mount with connectors to rear.

Multiple satellite hubs are available for two, three and five coax inputs (models S2x6, S2x8, S2x12, S3x3, S3x6, S3x8 & S5x8).

## FEATURES

- *Assembled in USA*..... fully tested
- *Compatibility* ..... DIRECTV® & DISH®
- *Professional packaging* ..... UPS safe
- *Automatic Gain* ..... for max switch output
- *Multiple mounting methods* ..... Wall or Rack

## APPLICATION NOTES

Engineering, manufacturing and software facilities often need live signals to large quantities of receivers.

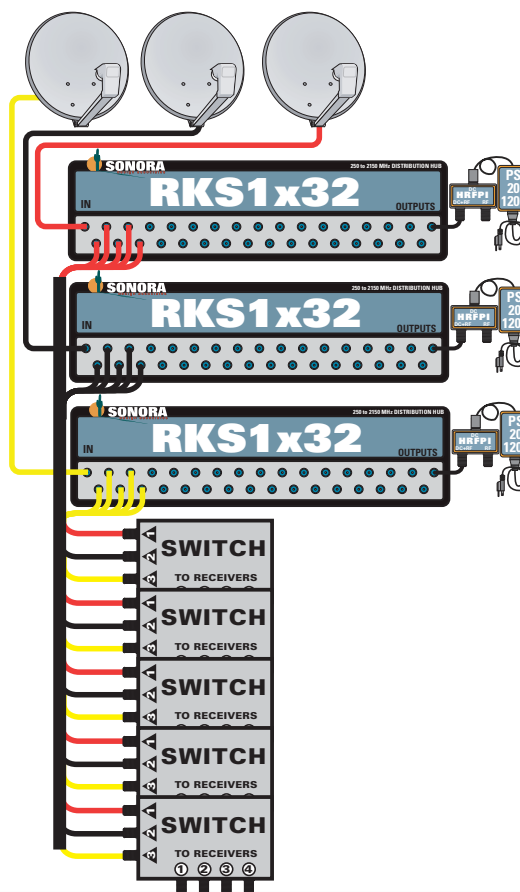
Single rack unit hubs with automatic gain output levels provide quality signals to switches serving the receivers.

Hubs are designed with a -32 dBm output to offset cable loss from hub to device or -45 dBm output for local switches or receivers.



## DESCRIPTION

One satellite hubs create multiple amplified outputs in a compact footprint.



Model	Outputs	AGC Input Window	Gain @ Input below AGC	Output Level @ AGC	Case Size	Wall Mount	Rack Mount
S1x6	6	-51 to -31 dBm	2 @ 14 dB 4 @ 18 dB	2 @ -33 dBm 4 @ -37 dBm	11"L x 6" W x 3" H	YES	NO
S1x8	8	-49 to -29 dBm	21 dB	-28 dBm	11"L x 6" W x 3" H	YES	NO
S1x12	12	-49 to -29 dBm	4 @ 21 dB 8 @ 16 dB	4 @ -28 dBm 8 @ -33 dBm	11"L x 12" W x 3" H	YES	NO
S1x16	16	-49 to -29 dBm	21 dB	-28 dBm	11"L x 12" W x 3" H	YES	NO
S1x24	24	-45 to -25 dBm	13 dB	-32 dBm	11"L x 12" W x 3" H	YES	NO
S1x32	32	-45 to -25 dBm	13 dB	-32 dBm	11"L x 12" W x 3" H	YES	NO
RKS1x24	24	-51 to -31 dBm	4 dB	-45 dBm	14" D, 17.5" W, 1.75" H	"W"	"F" or "R"
RKS1x24H	24	-49 to -29 dBm	13 dB	-32 dBm	14" D, 17.5" W, 1.75" H	"W"	"F" or "R"
RKS1x32	32	-51 to -31 dBm	4 dB	-45 dBm	14" D, 17.5" W, 1.75" H	"W"	"F" or "R"
RKS1x32H	32	-49 to -31 dBm	13 dB	-32 dBm	14" D, 17.5" W, 1.75" H	"W"	"F" or "R"

The table lists the models of single satellite hubs available with specifications of:

- Automatic Gain Control (AGC) input windows
- Gain at inputs below the AGC window
- Output levels with AGC based on 16 transponders at equal input levels

- Case size in inches
- Wall mount: YES or "W" for optional wall mounting hardware
- Rack Mounting: NO or "F" for Faceplate with connectors at back of rack or "R" for rear-mount with connectors facing the front of rack

## SPECIFICATIONS

**Specifications.....Typical .....QC Limit**  
**Inputs.....(1) at 250 to 2150 MHz**

### Return Loss

Input Return Loss .....12 dB..... 10 dB  
 Output Return Loss .....12 dB..... 10 dB

### Pass band Flatness

Any 24 MHz band .....0.1 dB..... 0.2 dB

**Noise Figure..... 4 dB.....5 dB**

**Gain..... see product table**

### Power Specifications .....receiver powered or

External Transformer .....20 VDC, 1.2 A  
 Current (hub) .....200 mA max  
 Coax In-line powering.....from outputs  
 LNB voltage..... 19 VDC

### Mechanical Specifications

Aluminum.....(3) sizes  
 Black powder coated..... 11" L x 6" W x 3" H  
 Black powder coated..... 11" L x 6" W x 3" H  
 1 Rack unit bare aluminum .....14" L x 17.5" W x 1.75" H  
 Master Carton ( 4 units).....19" x 15" x 6"

**Weight .....Unit Weight.....MC Weight**  
 S1x6 .....4 lb (1.8 kg)..... 17 lb (7.7 kg)  
 S1x8 .....5 lb (2.3 kg)..... 21 lb (9.5 kg)  
 S1x12.....6 lb (2.7 kg).....24 lb (11.3 kg)  
 S1x16.....7 lb (3.2 kg).....29 lb (13.2 kg)  
 S1x24.....7 lb (3.2 kg).....29 lb (13.2 kg)  
 S1x32.....8 lb (3.6 kg).....29 lb (13.2 kg)

**Weight .....Unit Weight.....MC Weight**  
 RKS1x24.....7 lb (3.2 kg).....29 lb (13.2 kg)  
 RKS1x24H.....7 lb (3.2 kg).....29 lb (13.2 kg)  
 RKS1x32.....7 lb (3.2 kg)..... 29 lb (13.2 kg))  
 RKS1x32H.....7 lb (3.2 kg).....29 lb (13.2 kg)

### Environmental Specifications

Operating Environment:.....Indoor  
 Ambient Temperature .....-30° C to +70°C