

SCALA

PROFESSIONAL ANTENNA SYSTEMS FOR
BROADCAST AND COMMUNICATIONS

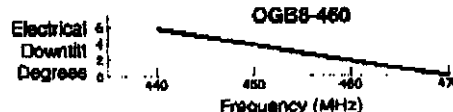
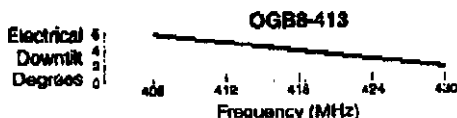
The Scala OGB8-413 and OGB8-460 omnidirectional broadband antennas are intended for use in professional fixed-station applications in the 406-430 and 440-470 MHz bands. They feature:

- Collinear broadband design.
- Brass radiator completely housed within radome.
- Heavy-duty one-piece tapered fiberglass radome.
- Inner conductor, and all metal parts at DC ground potential.
- Extreme weather survival design.
- Integral cast aluminum base.
- Stainless steel hardware and fastenings.

Specifications:

	OGB8-413	OGB8-460
Frequency range	406-430 MHz (broadband)	440-470 MHz (broadband)
Gain	8 dBd	8 dBd
Impedance	50 ohms	50 ohms
VSWR	< 1.5:1	< 1.5:1
Polarization	Vertical	Vertical
Maximum input power	500 watts (at 50°C)	500 watts (at 50°C)
H-plane beamwidth	Omni	Omni
E-plane beamwidth	8 degrees (half-power)	8 degrees (half-power)
Termination	N female	N or 7/16 DIN female
Electrical downtilt	See chart below	See chart below
Weight	15 lb (6.8 kg)	15 lb (6.8 kg)
Height	173.2 inches (4400 mm)	164.3 inches (4173 mm)
Radome diameter	1.2 to 2 inches (30 to 52 mm) (tapered)	1.2 to 2 inches (30 to 52 mm) (tapered)
Equivalent flat plate area	1.3 ft ² (0.121 m ²)	1.23 ft ² (0.114 m ²)
Wind survival rating	90 mph (150 kph)	90 mph (150 kph)
Shipping dimensions	185 x 8 x 7 inches (4699 x 204 x 178 mm)	173 x 8 x 7 inches (4386 x 204 x 178 mm)
Shipping weight	24 lb (10.9 kg)	24 lb (10.9 kg)
Mounting	For masts of 1.2 to 4.125 inches (30 to 105 mm) OD.	

See reverse for order information.



OGB8-413

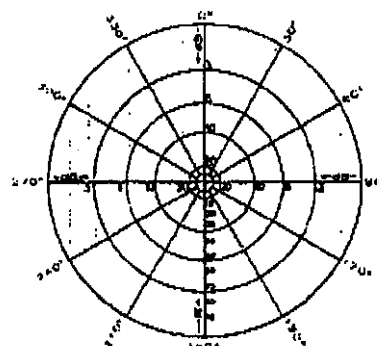
OGB8-460

OMNIDIRECTIONAL ANTENNA

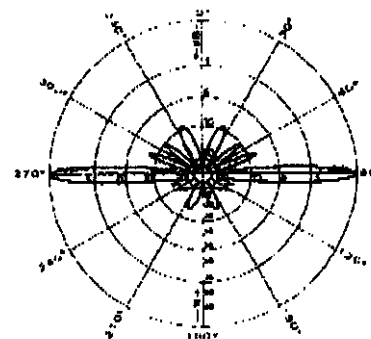
8 dBd gain

406-430 MHz (broadband)

440-470 MHz (broadband)



H-plane
Horizontal pattern - V-polarization



E-plane
Vertical pattern - V-polarization

SCALA ELECTRONIC CORPORATION

Post Office Box 4580
Medford, OR 97501 (USA)

Phone: (541) 779-6500
Fax: (541) 779-3991

<http://www.scala.net>

Scala Electronic Corporation is a member of the Kathrein Group

Exhibit 1 (Obverse)

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OGB8-413

OGB8-460

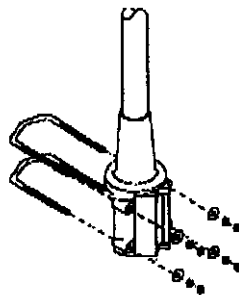
OMNIDIRECTIONAL ANTENNA

8 dBd gain

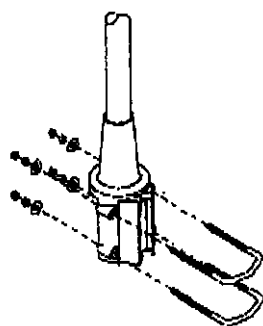
406-430 MHz (broadband)

440-470 MHz (broadband)

A



B



Mounting Options:

	Description
A	Mounting for 2.6 to 4.125 inch (66 to 105 mm) OD mast
B	Mounting for 1.2 to 3.5 inch (30 to 90 mm) OD mast

Order Information:

Model	Description	Stock Code
OGB8-413	Antenna with N termination	01500-025
OGB8-460N	Antenna with N termination	65103-001
OGB8-460D	Antenna with 7/16 DIN termination	65425-001

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<http://www.scala.net>

Exhibit 1 (Reverse)

164.3 inches
(4173 mm)

&

173.2 inches
(4400 mm)

170.1 inches
(4321 mm)

&

178 inches
(4547 mm)

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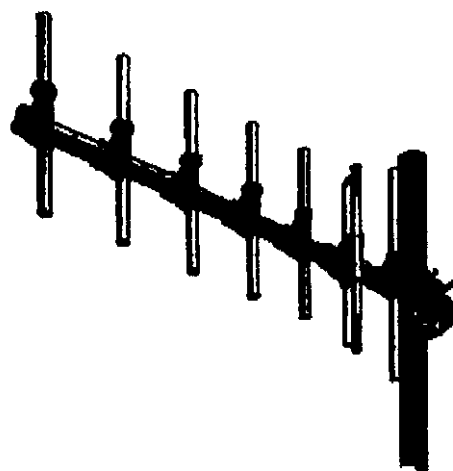
PROFESSIONAL ANTENNA SYSTEMS FOR
BROADCAST AND COMMUNICATIONS

CA7 Series YAGI ANTENNA

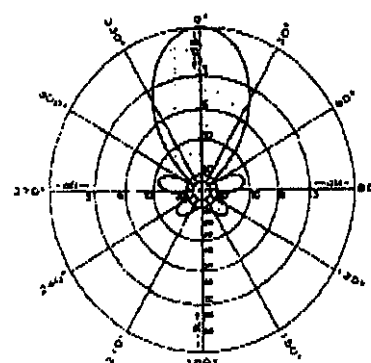
10 dBd gain
406-512 MHz

The Scale CA7 series yagi antennas are intended for use in professional fixed-station applications in the 406-512 MHz band. They feature:

- Internal balun and dipole feedpoint sealed within the boom assembly.
- Balanced feed system, with no capacitors.
- Heavy-wall anodized aluminum pipe and tubing.
- Heavy-duty aluminum castings and stainless steel hardware.
- All aluminum components anodized for corrosion resistance.
- Entire antenna at DC ground potential.
- Dual and quad arrays also available.

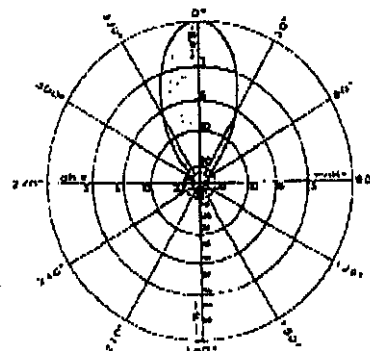


(Shown vertically polarized)



H-plane

Horizontal pattern - V-polarization
Vertical pattern - H-polarization



E-plane

Horizontal pattern - H-polarization
Vertical pattern - V-polarization

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PROFESSIONAL ANTENNA SYSTEMS FOR
BROADCAST AND COMMUNICATIONS

Specifications:	CA7-410	CA7-460
Frequency range	408-420 MHz	450-470 MHz*
Gain	10 dBd	10 dBd
Impedance	50 ohms	50 ohms
VSWR	<1.35:1	<1.35:1*
Polarization	Horizontal or vertical	Horizontal or vertical
Front-to-back ratio	>18 dB	>18 dB
Maximum input power	250 watts (at 50°C)	250 watts (at 50°C)
H-plane beamwidth	53 degrees (half-power)	53 degrees (half-power)
E-plane beamwidth	41 degrees (half-power)	41 degrees (half-power)
Termination	N female	N female
Weight	6.5 lb (2.95 kg)	6.5 lb (2.95 kg)
Dimensions	44 x 18.5 inches (1118 x 419 mm)	39.9 x 14.9 inches (1013 x 378 mm)
Equivalent flat plate area	0.8 ft ² (0.074 m ²)	0.74 ft ² (0.069 m ²)
Wind survival rating	120 mph (200 kph)	120 mph (200 kph)
Shipping dimensions	48 x 26 x 8 inches (1219 x 660 x 152 mm)	41 x 15 x 6 inches (1041 x 381 x 152 mm)
Shipping weight	12 lb (5.4 kg)	9 lb (4.1 kg)
Mounting	For masts of 2.375 inches (60 mm) OD.	For masts of 2.375 inches (60 mm) OD.

* VSWR for 440-470 MHz <1.5:1

Order information:

Model	Stock Code
CA7-410 (408-420 MHz)	91700-001
CA7-460 (450-470 MHz)	91700-003
CA7-480 (470-480 MHz)	91700-004
CA7-490 (480-500 MHz)	91700-005
CA7-500 (490-512 MHz)	91700-006

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CA7 Series

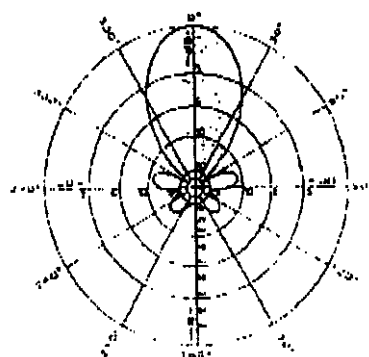
YAGI ANTENNA

10 dBd gain
406-512 MHz

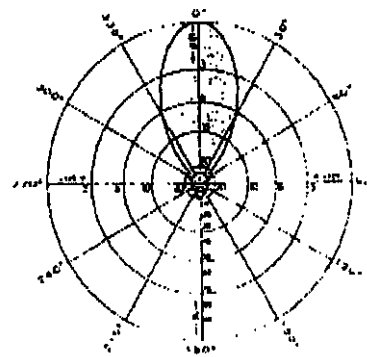
Exhibit 2 Pg.3

CA7-480	CA7-490	CA7-500
470-490 MHz	480-500 MHz	490-512 MHz
10 dBd	10 dBd	10 dBd
50 ohms	50 ohms	50 ohms
<1.35:1	<1.35:1	<1.35:1
Horizontal or vertical	Horizontal or vertical	Horizontal or vertical
>18 dB	>18 dB	>18 dB
250 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C)
53 degrees (half-power)	53 degrees (half-power)	53 degrees (half-power)
41 degrees (half-power)	41 degrees (half-power)	41 degrees (half-power)
N female	N female	N female
6.5 lb (2.95 kg)	6.5 lb (2.95 kg)	6.5 lb (2.95 kg)
38.1 x 13.1 inches (968 x 333 mm)	37.6 x 12.2 inches (958 x 311 mm)	36.5 x 12.5 inches (927 x 318 mm)
0.72 ft ² (0.067 m ²)	0.71 ft ² (0.066 m ²)	0.7 ft ² (0.065 m ²)
120 mph (200 kph)	120 mph (200 kph)	120 mph (200 kph)
41 x 15 x 6 inches (1041 x 381 x 152 mm)	41 x 15 x 6 inches (1041 x 381 x 152 mm)	41 x 16 x 6 inches (1041 x 381 x 152 mm)
9 lb (4.1 kg)	9 lb (4.1 kg)	9 lb (4.1 kg)
For masts of 2.375 inches (60 mm) OD.	For masts of 2.375 inches (60 mm) OD.	For masts of 2.375 inches (60 mm) OD.

Typical radiation patterns of CA7-series yagi antennas.



H-plane
Horizontal pattern - V-polarization
Vertical pattern - H-polarization



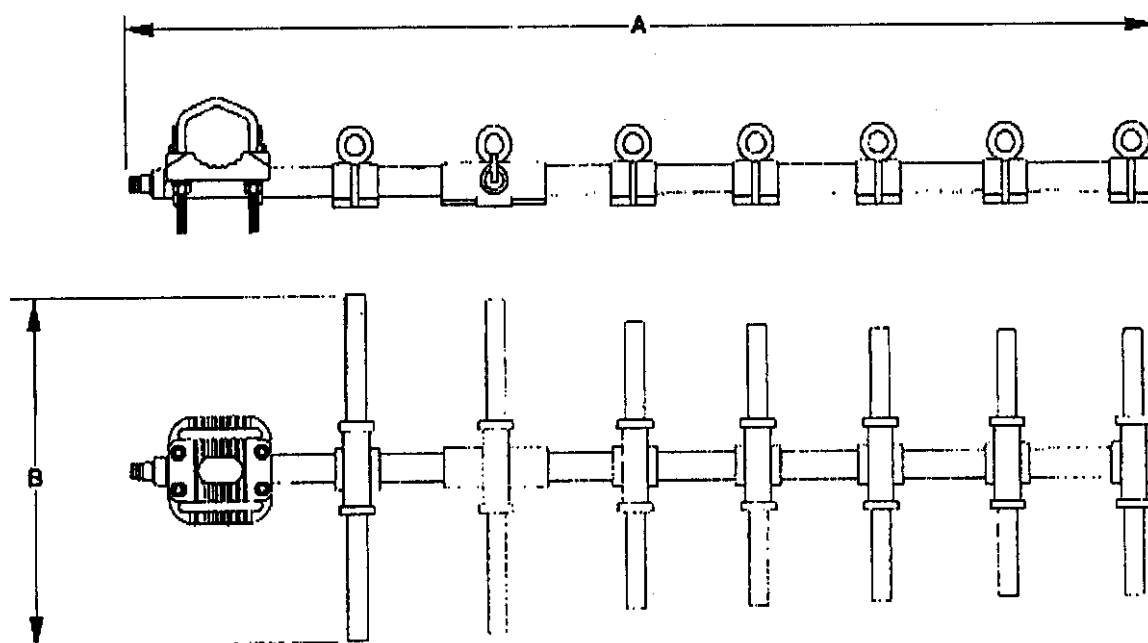
E-plane
Horizontal pattern - H-polarization
Vertical pattern - V-polarization

SCALA

CA7 Series YAGI ANTENNA

10 dBd gain
406-512 MHz

Exhibit 2 Pg.4



(Shown vertically polarized)

Dimensions:

Model	A	B
CA7-410	44 inches (1118 mm)	16.5 inches (419 mm)
CA7-460	39.9 inches (1013 mm)	14.8 inches (378 mm)
CA7-480	38.1 inches (986 mm)	13.1 inches (333 mm)
CA7-490	37.8 inches (956 mm)	12.2 inches (311 mm)
CA7-500	36.5 inches (927 mm)	12.5 inches (318 mm)

All specifications are subject to change without notice