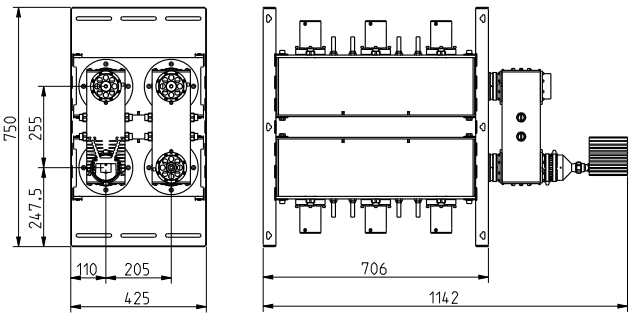
UHF Constant Impedance Combiner

10 kW rms, 6 Pole, Lowloss, Compact

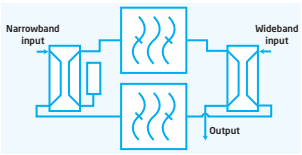
BAND IV-V

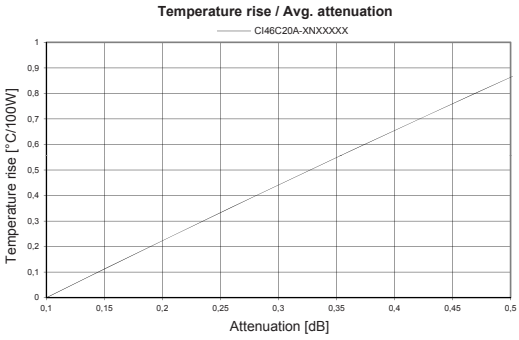
10 year GUARANTEE

SPECIFICATIONS	200 mm Compact Series
FREQUENCY	470 - 862 MHz
BANDWIDTH	6 - 8 MHz
STANDARD ORDER	6 Poles single cross coupling
OPTIONAL ORDER	6 Poles with or without double cross coupling
APPLICATION	Adjacent Ch combining
ATV	Spurious supress
DVB	Non critical mask
ATSC	Stringent mask
ISDB	Non critical mask
IMPEDANCE	50 Ohm
NB RETURN LOSS (VSWR)	>26 dB (<1.11)
WB RETURN LOSS (VSWR)	>26 dB (<1.11), UHF band >30 dB (<1.07), 2 specified channels
MAX OUTPUT POWER RATING**	36 kW rms NAX120 (coupler type K) 30 kW rms 4 1/2" (coupler type K) 15 kW rms 3 1/8" (coupler type J)
NB INPUT CONNECTOR	3 1/8" unflange (coupler type J)
NB OPTIONAL INPUT CONNECTOR	1 5/8" unflange
WB STANDARD INPUT CONNECTOR	NAX120
WB OPTIONAL INPUT CONNECTORS	3 1/8" unflange, 4 1/2" unflange
STANDARD OUTPUT CONNECTOR	NAX120
OPTIONAL OUTPUT CONNECTORS	3 1/8" unflange, 4 1/2" unflange
TEMPERATURE STABILITY	< 2 kHz / °C
MAX PRODUCT TEMPERATURE	70 °C
ENVIROMENTAL CONDITION	-5 to 70 °C IP40



DIMENSIONS AND WEIGHT	
DIMENSIONS	1142 x 425 x 750 mm
L x W x H	(45 x 16.7 x 29.5 in)
WEIGHT	85 kg (187.4 lb)
STANDARD FRAME	Stand alone / 19"
COLOUR	Black and aluminium





Article structure:
ARTICLE: CI46C20A-1NJK3WW

- **CI** = Combiner Type
- **4** = Frequency band
- **6** = Number of poles
- **C** = Cavity based
- **20** = Cavity size
- **A** = Version
- **1** = Number of cross coupling
  0 = without, 1 = single, 2 = double
- **N** = Coating
  0 = without, P = painted, N = painted & silver plated
- **J** = Narrowband coupler
  G = 54mm, J = 110mm, K = 130mm
- **K** = Wideband coupler
  G = 54mm, J = 110mm, K = 130mm
- **3** = Narrowband connection
  1= 1 5/8" unflange, 3 = 3 1/8" unflange
- **W** = Wideband connection
  3 = 3 1/8" unflange, P = 4 1/2" unflange, W = Nax 120 unflange male
- **W** = Output connection
  3 = 3 1/8" unflange, P = 4 1/2" unflange, W = Nax 120 unflange male

TYPICAL DATA*		8 MHz DVB-T/2		6 MHz ISDB-T		6 MHz ATSC
ARTICLE NO		CI46C20A-1Nxxxxx		CI46C20A-1Nxxxxx		CI46C20A-1Nxxxxx
NB INSERTION LOSS						
Avg. signal bandwidth		<0.34 dB		<0.41 dB		<0.40 dB
Centre frequency		<0.29 dB		<0.37 dB		<0.37 dB
Signal band edge	± 3.88 MHz	<0.9 dB (3,8 MHz 0,68 dB)	± 2.79 MHz	<0.58 dB	± 2.69 MHz	<0.48 dB
	± 4.2 MHz	>5 dB	± 3.15 MHz	>1 dB	± 3.5 MHz	>1.30 dB
	± 6.0 MHz	>16 dB	± 4.5 MHz	>17 dB	± 6.0 MHz	>29 dB
	± 12.0 MHz	>41 dB	± 9.0 MHz	>47 dB	± 9.0 MHz	>63 dB
WB INSERTION LOSS						
	± 24 MHz	<0.10 dB	± 18 MHz	<0.10 dB	± 18 MHz	<0.10 dB
	± 16 MHz	<0.10 dB	± 12 MHz	<0.10 dB	± 12 MHz	<0.10 dB
	± 8.0 MHz	<0.20 dB	± 6 MHz	<0.20 dB	± 6 MHz	<0.20 dB
ISOLATION						
NARROWBAND - WIDEBAND		>36 dB		>36 dB		>36 dB
WIDEBAND - NARROWBAND @						
	± 4.2 MHz	>36 dB	± 3.21 MHz	>36 dB	± 3.31 MHz	>36 dB
	± 8.0 MHz	>60 dB	± 6 MHz	>65 dB	± 6 MHz	>75 dB
	± 16 MHz	>85 dB	± 12 MHz	>85 dB	± 12 MHz	>95 dB
	± 24 MHz	>95 dB	± 18 MHz	>100 dB	± 18 MHz	>110 dB
NB GROUP DELAY VARIATION		<335 ns		<155 ns		<75 ns
NB MAX INPUT POWER RATING**		10 kW / 13 dB (crest factor)		9.6 kW / 13 dB (crest factor)		10 kW / 11 dB (crest factor)
TEMPERATURE RISE		<0.4 °C / 100 W		<0.5 °C / 100 W		<0.4 °C / 100 W
MASK COMPLIANT		Non critical mask		Non critical mask		Stringent mask

* Data in table is typical data at 666 MHz. To fulfil mask transmitter shoulder level must be >36 dB. The combiner can be tuned for other specifications or bandwidth. Please contact us for a designed specification.
** Max power rating at <50 °C temprice at max frequency. Data are subjected to change without prior notice.