

## Indoor Left or Right Hand Circularly Polarized Patch Antennas for mounting on Wall or Ceiling

### DESCRIPTION

- Low-profile antenna for the 450 MHz band.
- PCPI 70/xH/... is a Left or Right Hand Circularly Polarized patch antenna for indoor use.
- Circularly polarized antenna is chosen to avoid out-of-phase signals.
- Reduces flutter considerably.
- Specially designed for closed rooms.
- Covers approx. 20 MHz with a radiation of approx. 7 dBic (5 dBi in each E- and H-plane).
- Full size  $\frac{1}{2} \lambda$  patch antennas.
- The antennas are carefully sealed with a discrete cover.
- The connector is placed at one side to enable mounting close to a wall or a ceiling.
- Chassis also available in stainless steel PCPI 70R/xH/... (see ordering designations).
- Connection also available on backside (see overleaf).



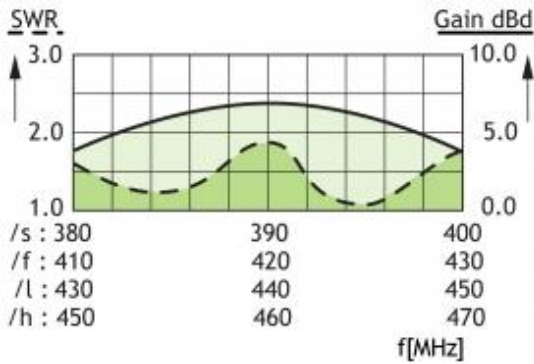
### SPECIFICATIONS

Electrical	
Model	PCPI 70/xH/...
Frequency	380 - 470 MHz covered by four models
Antenna Type	Left or right hand circularly polarized patch antenna
Max. Input Power	100 W
Polarisation	Circular
3 dB Beamwidth, E-Plane	80 °
3 dB Beamwidth, H-Plane	80 °
Impedance	50 Ω
Gain	7 dBic (5 dBi)
In iBwave	Yes
Mechanical	
Connection(s)	N(f)
Materials	Cover : PS (white) Chassis : Aluminium
Colour	Marine white
Dimensions	Approx. 415 x 415 x 25 mm / 16.34 x 16.34 x 0.98 in.
Weight	Approx. 1.8 kg / 3.97 lb.
Mounting	For mounting on wall or ceiling 4.5 mm dia x 20 mm (4 holes)
Environmental	
Operating temperature range	-30 °C to +75 °C
Storage temperature range	-40 °C to +75 °C
Humidity	< 90% non-condensing
Ingress Protection	IP55

### ORDERING

Model	Product No.	Frequency
<b>Standard version</b>		
PCPI 70/LH/s	100000146	380 - 400 MHz
PCPI 70/LH/f	100000147	410 - 430 MHz
PCPI 70/LH/l	100000148	430 - 450 MHz
PCPI 70/LH/h	100000149	450 - 470 MHz
PCPI 70/RH/s	100000145	380 - 400 MHz
PCPI 70/RH/f	100000143	410 - 430 MHz
PCPI 70/RH/l	100000144	430 - 450 MHz
PCPI 70/RH/h	100000150	450 - 470 MHz
<b>Stainless steel version</b>		
PCPI 70R/LH/s	100000302	380 - 400 MHz
PCPI 70R/LH/f	100000303	410 - 430 MHz
PCPI 70R/LH/l	100000304	430 - 450 MHz
PCPI 70R/LH/h	100000305	450 - 470 MHz
PCPI 70R/RH/s	100000306	380 - 400 MHz
PCPI 70R/RH/f	100000151	410 - 430 MHz
PCPI 70R/RH/l	100000307	430 - 450 MHz
PCPI 70R/RH/h	100000152	450 - 470 MHz
<b>BC version</b>		
PCPI 70/LH/s-BC	100000337	380 - 400 MHz
PCPI 70/LH/f-BC	100000338	410 - 430 MHz
PCPI 70/LH/l-BC	100000339	430 - 450 MHz
PCPI 70/LH/h-BC	100000340	450 - 470 MHz
PCPI 70/RH/s-BC	100000333	380 - 400 MHz
PCPI 70/RH/f-BC	100000334	410 - 430 MHz
PCPI 70/RH/l-BC	100000335	430 - 450 MHz
PCPI 70/RH/h-BC	100000336	450 - 470 MHz

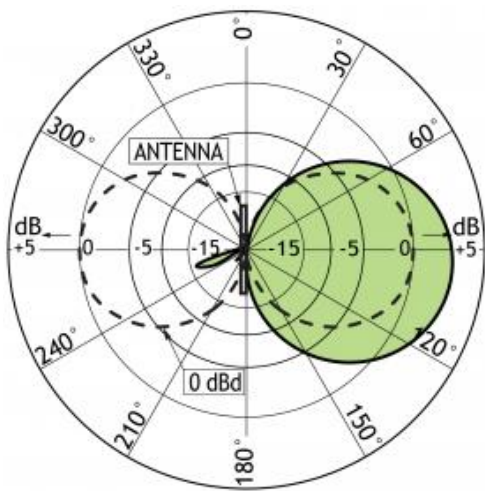
TYPICAL GAIN AND VSWR CURVES



CONNECTION ON BACKSIDE

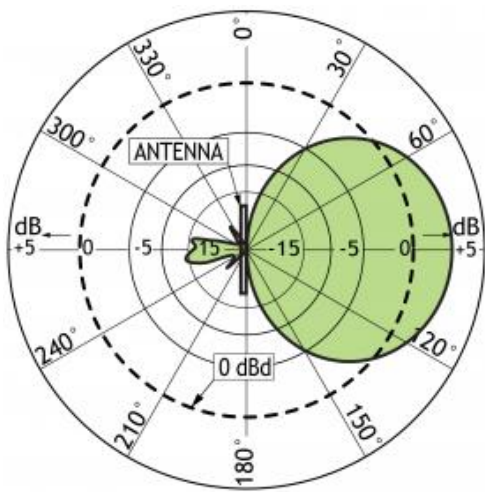


TYPICAL RADIATION PATTERN (E-PLANE)



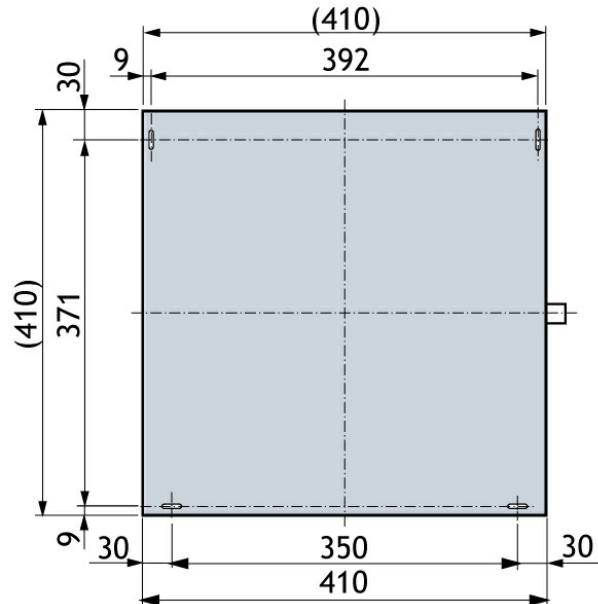
This curve shows the radiation patterns in the vertical plane.

TYPICAL RADIATION PATTERN (H-PLANE)



This curve shows the radiation patterns in the horizontal plane (horizontal coverage).

MOUNTING DETAILS (DIMENSIONS EXCL. COVER)



All dimensions are given in mm.

