

# Antennas system

## ATC S 03



ATC S03 consist of four transceiving sections designed and tuned in order to provide an even coverage of VHF and UHF bands. The antenna is enclosed in a tube made of plastic and covered with varnish resistant to environmental influences and UV radiation.

The top of antenna is equipped with LED obstruction light. In the bottom part there are connectors for feeding lines and power supply. The construction and location of all sections provides an adequate level of attenuation of crosstalks during simultaneous operation of two radio stations.

Antenna is equipped with the anti-freezing system preventing the mounting of thick layer of ice which might impede operation in UHF band and reduce the resistant to wind.

## ELECTRICAL

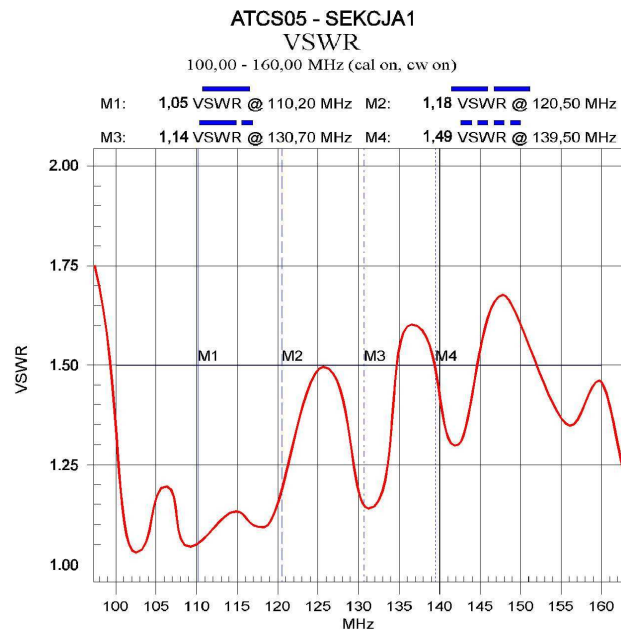
<b>Gain for VHF</b>	2,0 dB
<b>Gain for UHF</b>	2,0 dB
<b>Horizontal radiation pattern</b>	omnidirectional
<b>Impedance</b>	50 $\Omega$
<b>Antenna type</b>	discone, colinear
<b>VSWR</b>	$\leq 1.8$ @ VHF, $\leq 1.8$ @ UHF
<b>VHF range</b>	116 - 136 MHz
<b>UHF range</b>	200 - 400 MHz
<b>Number of UHF sections</b>	2
<b>Maximum power</b>	500 W
<b>Polarization</b>	vertical
<b>Supply of obstruction light</b>	12V / 0,6A
<b>Obstruction light</b>	red , 32 Cd
<b>Horizontal radiation pattern code (H-plane)</b>	<b>000ND00</b> (CEPT Recommendation T/R 25-08)
<b>Vertical radiation pattern code (E-plane)</b>	<b>039DE00</b> (CEPT Recommendation T/R 25-08)

## MECHANICAL

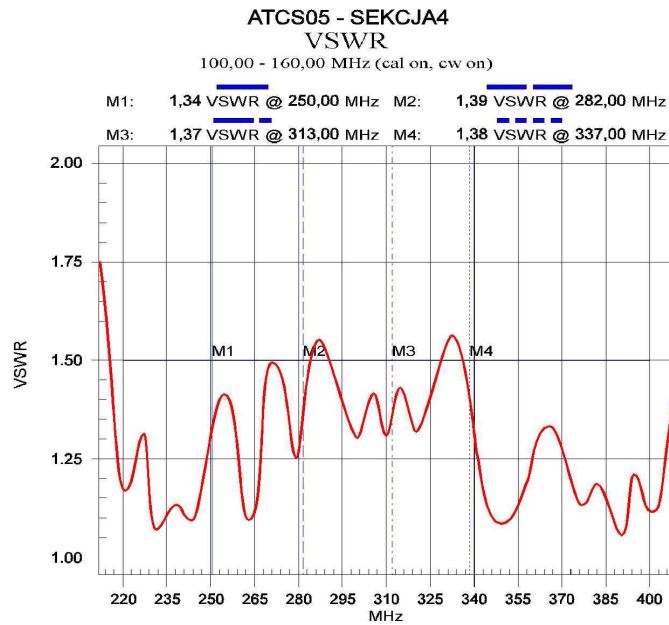
<b>Connector</b>	N, 7/16
<b>Material</b>	Aluminium
<b>Painting</b>	white / red or uniform
<b>Total weight</b>	40 kg
<b>Lightning protection</b>	Lightning rod on the top of antenna
<b>Dimensions of base</b>	767 x 767 mm
<b>Total dimension (diameter/height)</b>	250.0 / 33200.0 mm
<b>Packaging</b>	Carton box
<b>Warranty period</b>	12 months
<b>Wind speed</b>	40 m/s

## CLIMATIC CONDITIONS

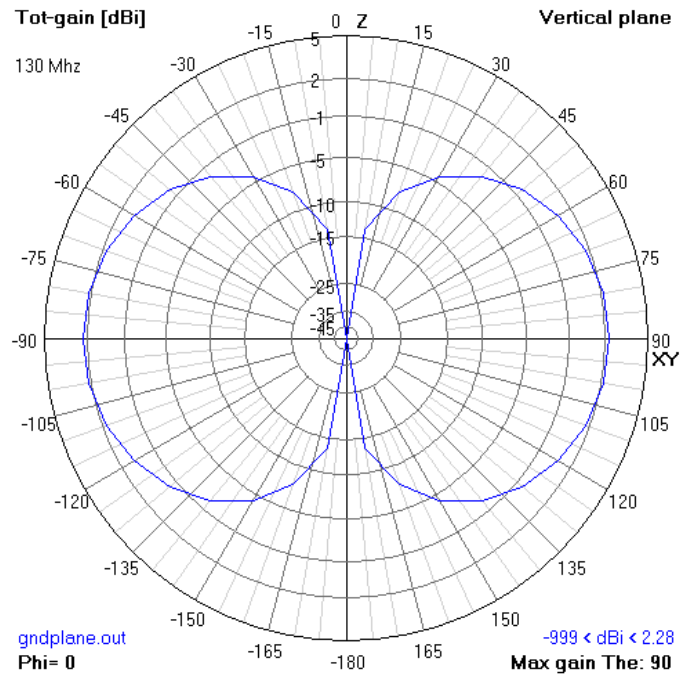
<b>Range of temperature</b>	-40°C ÷ +70°C
<b>Humidity</b>	$\leq 100\%$ at +40°C



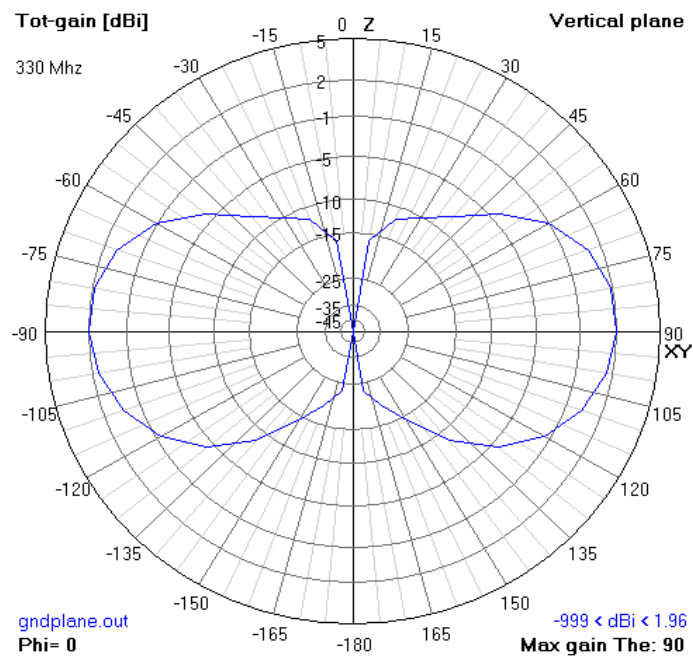
**VSWR of ATC S 03 system, VHF section**



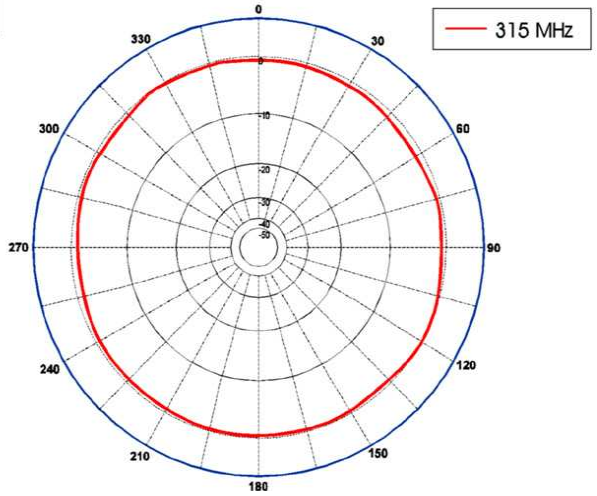
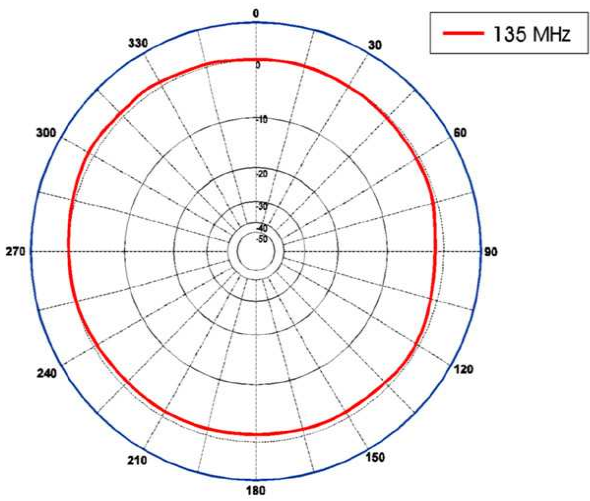
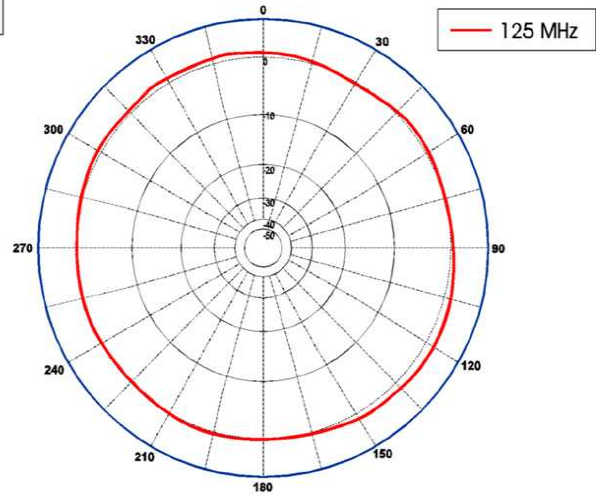
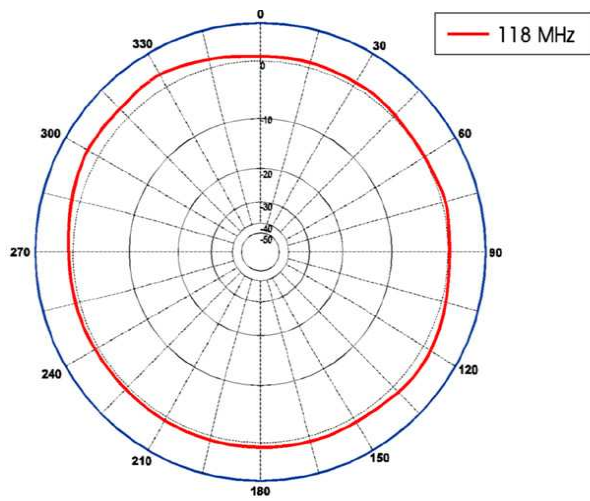
**VSWR of ATC S 03 system, UHF section**



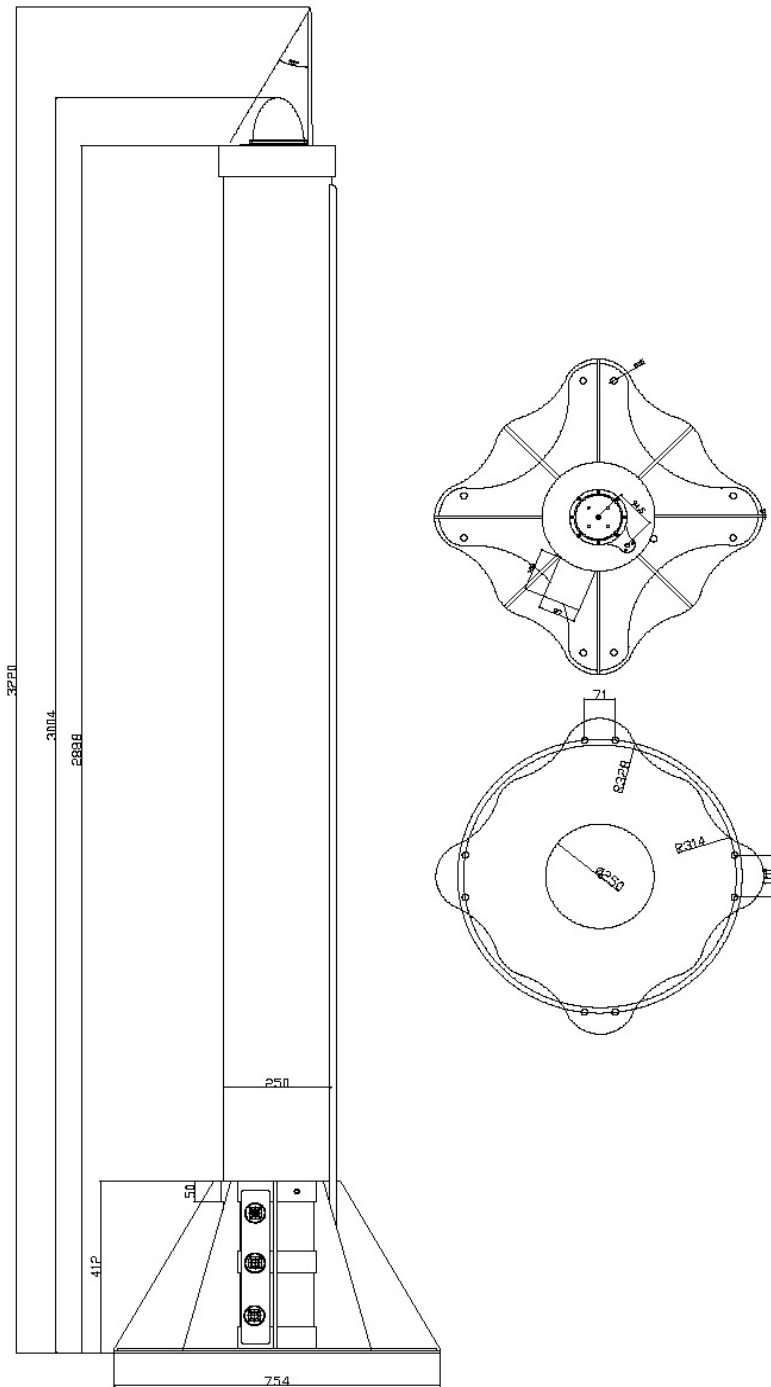
**Vertical radiation pattern of ATC S03 system, VHF section**



**Vertical radiation pattern of ATC S03 system, UHF section**



**Horizontal radiation pattern of ATC S03 system**



Dimensions of antenna and base



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