

# 150/150IS STOPE ANTENNA

## RNG-AN1, RIS-AN1



Varis' Smart Com 150 and Smart Com 150IS Stope Antennas (AN1) increase off-cable coverage into stopes and other areas where cable damage is likely. Stope Antennas are installed at the end of a Leaky Feeder cable run in place of termination units (RNG-TER, RIS-TER) when extra coverage is required.



RNG-AN1 (left), RIS-AN1 (right)

### Product Specifications

	STOPE ANTENNA	IS STOPE ANTENNA
Part Number	RNG-AN1	RIS-AN1
<b>Physical</b>		
Construction	Single Printed Circuit Board and antenna elements	
Enclosure	NEMA 4x (IP66), Polystyrene	NEMA 3 (IP54), Fiberglass reinforced polyester plastic
Dimensions (L x H x W)	900 x 75 x 130 mm (35.4 x 3.0 x 5.1 in)	900 x 75 x 145 mm (35.4 x 3.0 x 5.7 in)
Weight (nominal)	0.75 kg (1.65 lbs)	1.00 kg (2.20 lbs)
Connector	One 3 Terminal Lug Connector, PG21 cable grip	
Antenna Element	19 mm (0.75 in) diameter	
Conformal Coating	No	2 coats, CTI > 100
<b>Environmental</b>		
Temperature Range	-20 to +60° C (-4 to +140 °F)	
<b>Electrical</b>		
Input Voltage	0-40 Vdc	0-12 Vdc
DC Blocking	n/a	
<b>RF Characteristics</b>		
Antenna Type	Folded Dipole	
Impedance	75 ohms	
Gain	3 dBi	
Center Frequency	173 MHz	
Input Power (max)	1 Watt	
<b>Approvals</b>		
Intrinsic Safety	No	MSHA, Approval #23-A050001-0
CE Certification	Yes	Yes

## Installation

Use the following guidelines to ensure proper installation of Stope Antennas:

- Install an amplifier and a length of LF cable 3 m (10 ft) before the antenna for best results. If installing an amplifier, ensure that the previous amplifier is at least 350 m (1148 ft) away.
- Hang Stope Antenna on back vertically with clear view down drift.
- Ensure that Stope Antenna is not bundled with an amplifier.

## WARNINGS



The Smart Com 150IS Stope Antenna (RIS-AN1) is approved for use only when installed according to the requirements of Varis Mine Technology System Layout Drawing MSHA-IS-01.



Any changes in the Intrinsically Safe circuitry or components may result in an unsafe condition.

