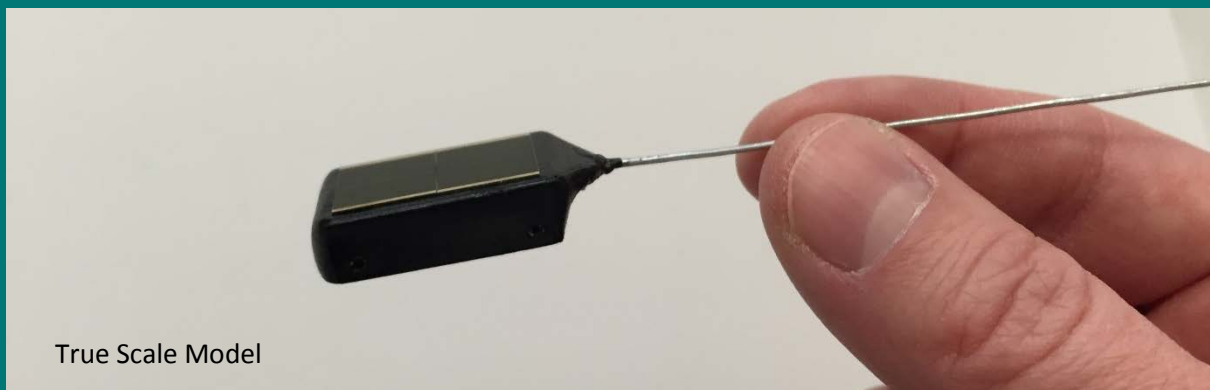


ICARUS SATELLITE TAG

Draft Data Sheet



	PHYSICAL PROPERTIES
Mass	5g
Dimensions	22 x 13 x 7 mm ³ (body) 150 mm (ICARUS antenna) 48 mm (GPS antenna)
Operating Temperature Range	-10°C...50°C
	SCIENCE
Measurement/Sensors	GPS position and velocity, 3D-acceleration (timed sample), heading in 3D (based on magnetic field vector), temperature
Acquisition Scheme	Configurable by tele-command
Data Storage	2 GB (equivalent to approx. 4 Mio GPS locations)
Data Acquisition Rate	Overcast conditions: 6-12 GPS fixes/d plus sensor data Sunny conditions: Rapid GPS fixes according to sunlight
Data Readout	Via satellite (ISS, within 60 deg N/S latitude) Arctic/Antarctic species: Data stored in memory, satellite readout when tag is within 60 deg N/S latitude
	COMMUNICATION TO SATELLITE
Uplink/Downlink Frequency	402.25 MHz / 468.1 MHz (global ITU permission)
Data Downlink	Tag commands
Data Uplink	220 byte user data per contact (e.g. 14 GPS positions incl. velocity)
Transmission Data Selection	Actual or historical data, selectable by tele-command
	COMMUNICATION TO HANDHELD DEVICE OR BASE STATION
Establishing Contact	Possible every 15 minutes
Data Transmission	User data @ 2.7 kbyte/s for max. 15 min (depending on battery charge)
Recovery	RF ('ping') homing + LED



True Scale Model