

# We help you solve challenges

Quality radio modems and modules for wireless data communication

## GNSS

Accurate and up-to-date data transfer in precise positioning systems is vital. SATEL's radio modems and modules offer a first-class solution e.g. for GNSS RTK, remote measurement and control applications. They combine quality, continuity, flexibility and low life cycle costs. Examples of GNSS systems that use SATEL's radio modems and modules include land surveying, precision farming, machine control, harbor logistics and port cranes.

## OEM

SATEL have produced a range of OEM radio modules for system manufacturers to integrate into customer solutions. They are secure, customizable and flexible in mounting options. SATEL's solutions are widely compatible and also support other manufacturers' radio protocols.



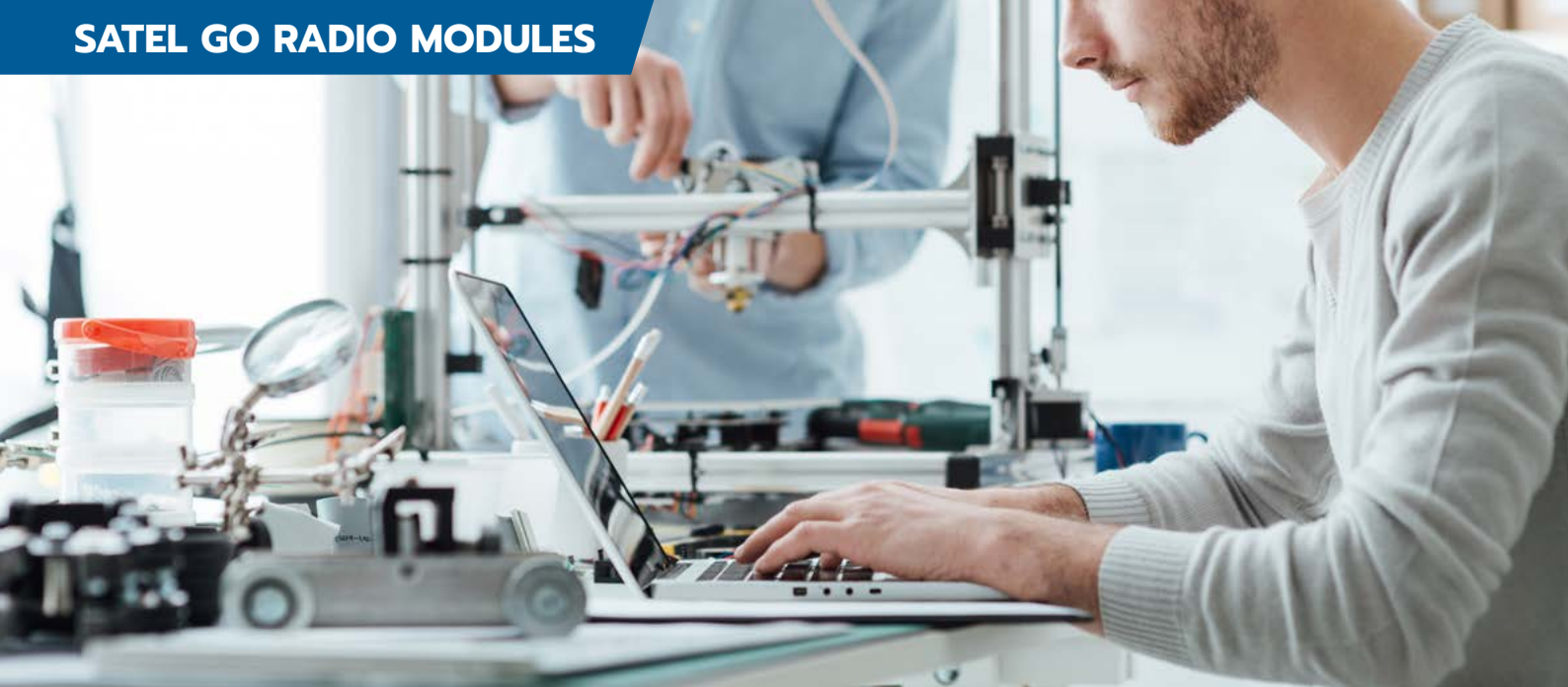
# SATEL

**Mission-Critical Connectivity**

[www.satel.com](http://www.satel.com)

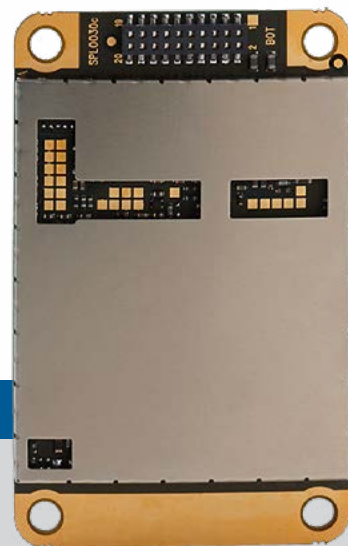
SATEL is one of the world's leading experts and innovators of radio modems for wireless data communication. Our solutions are used in wide range of industrial applications. We are known for our high quality, expertise, service and support.

**You can contact us directly or get in touch with your local distributor.**



## Small module on the move

SATEL-TR49 is a dual band and multimode transceiver for the licensed 410-475 MHz and license-free 902-928 MHz bands. It is compatible with SATELLINE product line on 410-475 MHz and Freewave and Intuicom products on 902-928 MHz.



### SATEL-TR49

#### RADIO TRANSCEIVER SPECIFICATIONS 902-928 MHz

##### Frequency range

902 ... 928 MHz

##### Spreading method

Frequency hopping

##### Hopping bands

7, user selectable

##### Hopping patterns

15 per band, 105 total, user selectable

##### Hopping channels

50-112, user selectable

##### Sensitivity/ Carrier power

-109 dBm / 1 W

##### Data speed

Radio / Serial 115200 bps

##### Modulation

2-GFSK

#### RADIO TRANSCEIVER SPECIFICATIONS 410...475 MHz

##### Frequency range

410...475 MHz

##### Tuning range

65 MHz

##### Channel spacing

12.5 / 20 / 25 kHz, selectable

##### Sensitivity/Carrier power

-120 dBm for 1% BER / 1 W

##### Data speed

Radio 19200 bps /  
Serial 115200 bps

##### Modulation

GMSK, 4-GFSK

#### GENERAL SPECIFICATIONS

##### Vibration tolerance

25 g, up to 2 kHz sinusoidal

##### Operating voltage

+3.7 ... 5.5 Vdc

##### Power consumption

440 mW (RX) / 4.1 W (TX 1 W)

900 MHz

440 mW (RX) / 4.8 W (TX 1 W)

400 MHz

##### Size/Weight

57 x 36 x 6.9 mm / 18 g

##### Connectors

1.27 mm pitch socket / U.FL

##### Interface

CMOS-UART

##### Operating temperature

-40 ... +70 °C

#### Complies with requirements in:

EU

USA

Canada

Australia

New Zealand

Brazil