

**HelioX Cosmos** provides you flexible, affordable and responsive solutions ranging from small satellite launch business to space outreach activities and together explore the NewSpace market.

## **SOLUTIONS**

SPACE LAUNCH SERVICE / BUSINESS DEVELOPMENT
SATELLITE COMPONENTS / TECHNICAL SUPPORT
SPACE EDUCATION / OUTREACH





# CubeSat

#### COMMUNICATION MODULE PRODUCT

# APRS Payload Module

#### Description:

**APRS** (Automatic Packet Reporting System) enables real-time repeat\* or forward positioning and data of ground tracking equipments, such as vehicles, animals, plants, ranging from ecological, industrial to civil purposes and various applications.

\*Real-time repeat: This optional function is disabled. The packet data real time repeater function is determined by frequency coordination and project application.

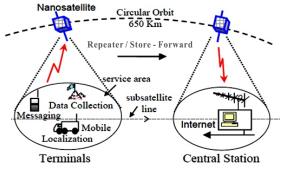


In the figure shown on the right, the data collect function could be configurable for repeater or store-forward to the ground station.

#### **Applications:**

The **APRS** payload "Real Time Repeater" / "Store & Forwarding" applications are:

- ♦ APRS Vehicle and vessels positioning with data collection
- ◆ APRS Ecological & seismic / tracking & detection: birds, animals, landslides, etc.
- ♦ APRS Ocean windmills, widespread area power grid management



### Payload Specification:

#### **General Specification:**

- Power Supply: 5V
- Power Consumption: 800mW.
- Operating Temperature: -20°C to +80°C
- Temperature Sensor
- Dimension: PC104 size compatible

#### **APRS Specification:**

- Receive Sensitivity: -126 dBm
- RX Frequency: 140-175MHz /

400-480MHz

- TX Power: 30/27dbm (optional)
- Modulation Schemes: FSK
- Data Rates: AX.25 1200bps
- RF connector: IPX
- Data Interface: UART TTL standalone.

