



ULYS - L GPS / GSM onboard beacon for locomotives surveillance

➤ Locomotives can be efficiently managed and monitored with Saphymo autonomous **Ulys-L** beacons for :

- ⇒ Higher asset utilisation
- ⇒ Improved production planning
- ⇒ Reduction of operating costs by improving asset visibility
- ⇒ Improved quality of service to customer

The **Ulys-L** beacons ensure maintenance-free satellite positioning of locomotive for at least 2 years without connection to onboard power supply.

The compact size of the **Ulys-L** beacon allows easy installation on various types of locomotive without hindering regular maintenance operations.

The **Ulys-L** beacons are designed to withstand the severe environmental conditions inherent to rail traction engines, such as high level electromagnetic fields, vibration and exposure to wide temperature changes.



➤ Technical characteristics

- ☛ **Autonomy** : 2 years
- ☛ **Power supply** : integrated lithium batteries
- ☛ **Dimensions** : 260 x 160 x 110 mm (aluminium box)
- ☛ **Operating temperature range** : from -20°C to +70°C
- ☛ **Positioning information** : built-in GPS receiver
- ☛ **Positioning transmission** : dual band GSM modem (SMS messages + Data Mode)
- ☛ **Water-resistant** : IP 67
- ☛ **Electromagnetic compatibility** : EN 50121-3-2
- ☛ **Connectors** : - 2 external ports RS 232
- 4 digital inputs
- ☛ **Compliant with Mapi software and with GAIA communication server**



- **Self-sufficient beacon (no external power required)**
- **Position request on demand**
- **Read-write capabilities enabling remote parameter setting and remote upgraded software downloads**
- **Positioning by satellite link**
- **Dual-band GSM data transmission**
- **Minimum maintenance requested**
- **Complete and automatic self-test system**
- **Low cost installation**

