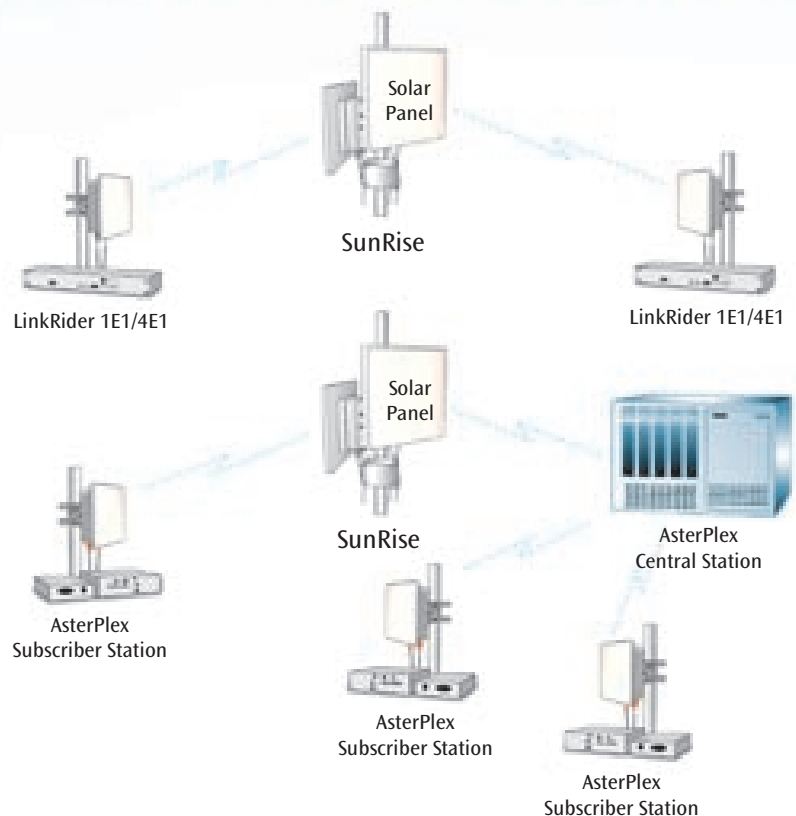




When the communication distance becomes greater, it's convenient and cost efficient to install Sunrise frequency repeaters. Armed complete with interface module and its own solar power supply, Sunrise is compatible with the Linkrider and Asterplex series.



Sunrise GENERAL TECHNICAL DATA

Frequency range (GHz)	2.4 – 2.6, 3.4 – 3.6, 5.1 – 5.9
Intermediate frequency (MHz)	70
Reference Frequency (MHz)	10
Frequency Instability (ppm)	0,3
Modulation	Noise-like or QPSK
Spectrum Width (MHz)	5 or 20
Duplex	Full FDD
Max output power (dBm)	20 – 30
Communication Distance (km)	20
Power Consumption (W)	from 12 to 100
Max Output Signal Level (dBm)	-30
Dynamic Range of Receiver (dB)	70
Receiver's Sensitivity (dBm)	-96 or -90
Delay	No any
MONITORING & CONTROL	
Via Radio-channel	Yes
Via Service Channel	No
Via Local Loop	Yes
CONFIGURATION	
With the Software	Yes
Manually	Yes
ID THROUGH REMOTE CONTROL UNIT	
Channels' State	Yes
CLIMATE DATA	
Temperature (°C)	From -40 to 60
Humidity (%)	Up to 100

Sunrise-Repeater

Sunrise is a set of two frequency converters, interface module and power supply. It is a repeater that utilizes solar energy to operate and relay wideband streams for voice, data and video. Sunrise performs as a relay and carries out the following applications:

- At duplex wideband systems for voice, data and video transmission
- At phone and radio relay communication systems
- At DS-CDMA channels
- Transceive QAM & QPSK - modulated signals

Key Advantages:

- Increase communication distance without any digital modems
- Repeat and amplify received radio signals and weak transmission
- Ensures smooth and continuous transmission
- Change signal's direction (allows to avoid obstacle/interference)
- Relay data signal without delays
- Absolutely autonomous product (powered from solar battery)
- At the installation mode, converter's settings can be changed by remote control unit data or via radio-channel