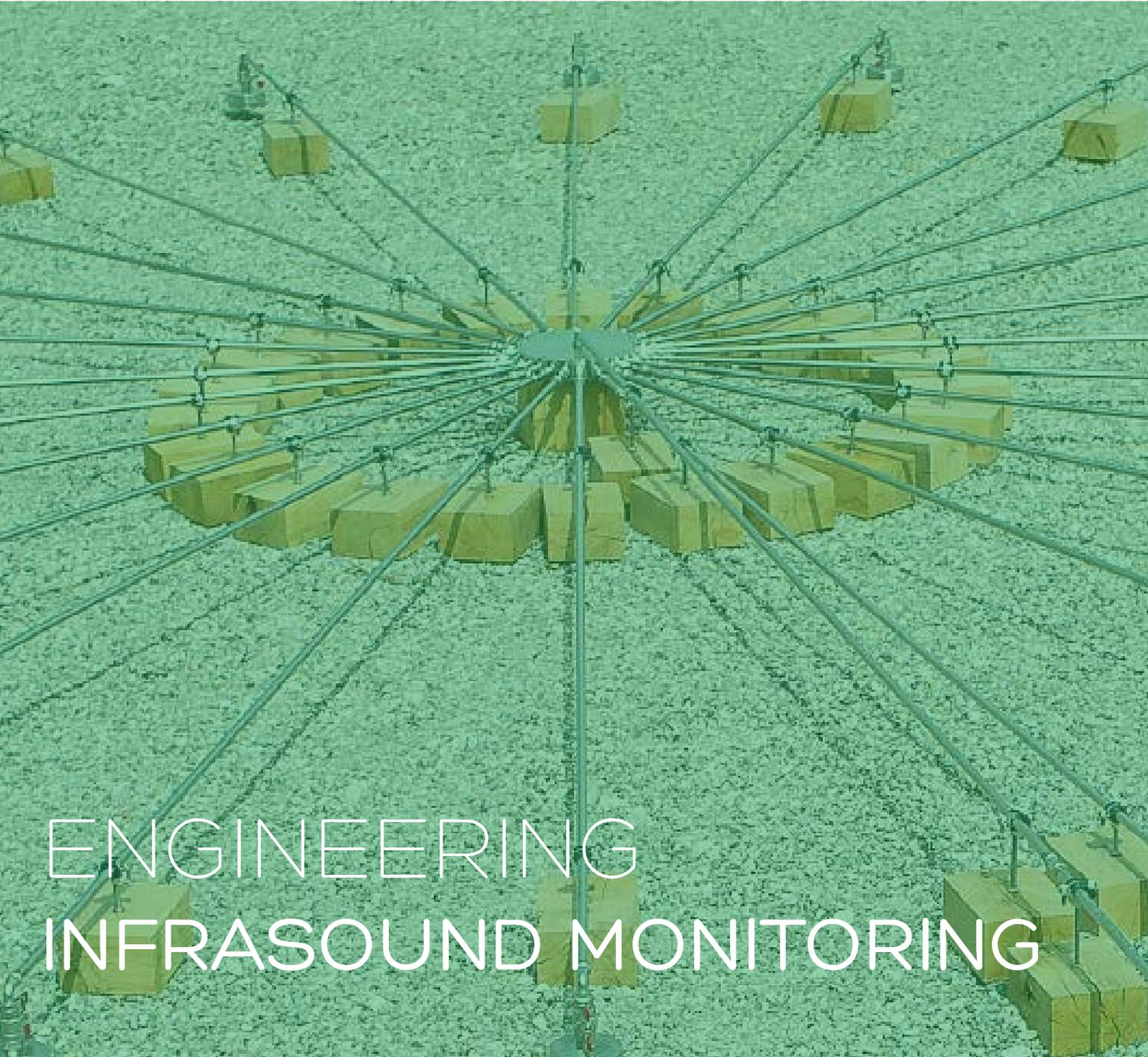


Thanks to their onsite experience gained over the years even in the most remote and isolated corners of the world, our engineers advice and support scientific institutions, rural communities, industries and mines... from the design to implementation of environmental monitoring systems and in the deployment of renewable energy on isolated sites.



ENGINEERING INFRASOUND MONITORING

DESIGN, OPERATION & MAINTENANCE OF INFRASOUND STATIONS



What is Infrasound (IS)?

Infrasound is bass sound below the human hearing range.

Infrasound can be excited by the movement, vibration or explosion of large things, or by fast objects.

Including earthquakes, tsunamis, bad weather, power generation systems, volcanoes, breaking waves, quarry blasts, nuclear tests, spacecraft, and meteors. Infrasound monitoring is then in growing development for civil security, defense and environmental survey applications.

Enviroearth experimented operator of remote IS monitoring stations

An historic partnership with the CTBTO (Nuclear Test-Ban-treaty UN Organization) operating the International Monitoring Network (IMS).

Since 2006, Enviroearth takes part in the operation & maintenance of Infrasound Stations in the Atlantic Ocean, IS48 located at Tristan da Cunha and IS11 located at Cape Verde. Over the years, Enviroearth has been participating in the expansion program that today consists in a network of 80 infrasound stations distributed uniformly around the world. Enviroearth has carried out maintenance or upgrade on several Infrasound Stations of the International Monitoring System.

A New innovative design of infrasound monitoring station hardware:

Enviroearth engineers and R&D team realized a gap analysis of the existing

IS hardware equipment to provide a new design in order to industrialize and supply a complete turnkey product line easier to install and maintain.

The Wind Noise Reduction System (WNRS) is a very sensitive part of a comprehensive station. The main challenge is to keep it perfectly sealed over long period of time. Enviroearth has developed a new range of WNRS exclusively made of stainless steel in order to optimize installation labor and reduce maintenance efforts and time. Every single part of our WNRS from the air inlet port up to the primary and secondary manifolds are stainless steel.

The selection of materials and the manufacturing possibilities allows the WNRS to be widely customizable and to fit to rough fields and extreme weather conditions. Special ranges of WNRS based on flexible tubes for dedicated applications are also available.

New waterproof and compact buried or surface vaults in Fiber glass or rugged molded plastic for the protection and long-life installation of the digitizer and electronic monitoring systems have been also industrialized.

Key Features

The new WNRS design is applicable to 18m, 36m and hexagonal WNRS.

- New design is applicable to 18m, 36m and hexagonal WNRS
- Innovative Stainless Steel (SS) single row manifold

- Long life SS inlet port
- Sealed sensor Housing
- Customized dimensions of Buried or surface high quality Vaults
- Possibility of supply of last generation of Micro-barometers and digitizers for supply of turnkey unit
- Factory tested before delivery

Applications

- Surveillance of Volcanoes, earthquake, Tsunamis, natural hazards
- Climate phenomena monitoring
- Detection of seismic events
- Control nuclear Test Ban Treaty

Our Added Values

Strong project management experience in complex international areas.

Tristan Da Cunha Island, Saint Helena Island, Cape Verde, Easter Island, Juan Fernandez Archipelago, Greenland, Kiribati, Kenya, Ivory Coast, Papua New Guinea, Paraguay,...

Logistics management related to isolation and severe environmental constraints; Our engineers are used to working in the most remote places in the world, on inhabited or uninhabited sites that are disconnected or connected to unreliable electrical grids

Risk anticipation and control, quality management, **responsiveness** and **adaptability**, diplomacy and listening skills.