MGBTECH
ENVIRONMENT MEASURING TECHNOLOGY

TARI BRAIN

- ✓ Trex DataExchange
- ✓ 4GB internal SD-Card
- ✓ Integrated GNSS receiver
- ✓ Icon based configuration
- ✓ Low power consumption
- ✓ Ethernet port
- ✓ Serial port
- ✓ Integrated Telemetry
  - GPRS modem
  - UHF radio
  - Iridium

This BRAIN module is part of the TARI product range. It handles logging, timekeeping and telemetry for your installation. It is the key to plugging your TARI installation succesfully into the MGB-Tech environmental ecosystem.

Every TARI setup needs one BRAIN. This module is the “brain” of the total setup. It channels the measurements of the total setup to get the functionality you need. All measurements are logged on the internal microSD card. Innovative compression algorithms minimize log space requirements and minimize the telemetry data required.

This module fully supports our DataExchange service. At a regular interval, measurements are pushed to DataExchange. This service is implemented not only on the integrated GPRS modem, but also on the optional IRIDIUM path. The compressed measurement data follows this secure and resilient path enabling true transpartant remote monitoring.

Aside from the GPRS modem, there is also an integrated UHF modem. The BRAIN module has two game changing features on the UHF telemetry path that set it apart. First, all data received over the UHF radio can be logged and forwarded via the DataExchange service. This brings about redundant telemetry paths to fortify your total system setup. The second big feature is time slotted UHF channel access. Every BRAIN can be assigned a time slot. This makes maximum use out of a low bandwidth ether and gives every transmitter maximum transmitting range.

Time slotted UHF and accurate measurement logging require accurate timekeeping. Therefore, every TARI BRAIN is equipped with a GNSS receiver that not only gives the position of the installation, but also keeps the internal real time clock synchronized.

The module comes with a graphical user interface. The icon-based configuration screen makes it easy to configure a fully operational setup without the need for a laptops or installing software.

Please note that this module needs other TARI components (BASE and MODULES) to have a full functional setup.

GNSS receiver
- **Active antenna 3.7V supply**
- **GPS/GLONASS L1**

microSD card
- **4GB card (max**

UHF modem
- **440-480 MHz**
- **Max power 1W**

2G modem
- **Frequency bands 850, 900, 1800, 1900**

IRIDIUM
- **SBD data upload to TREX**
- **1616 MHz to 1626.5 MHz**

Connectors
- **1 x M12 A-code 8P female (SERIAL)**
- **1 x M12 D-code 4P female (ETHERNET)**
- **1 x TNC (GNSS)**
- **1 x TNC (UHF)**
- **1 x TNC (GPRS)**
- **1 x TNC (UHF)**

Mechanical
- **225.0mm x 100.0mm x 75.0mm**
- **Weight 1.2 Kg**

Environmental
- **Operational temperature -20°C +55°C**
- **IP65**

Power consumption
- **2.2W (depends on telemetry usage)**