



Technical characteristics

- Easy installation, it does not need peculiar maintenance.
- 2 analogical channels with differential input : Measurement scales: $\pm 2V$, $\pm 20V$, $\pm 50V$;
- Resolution: 15bit + signum;
- Input impedance: 1M Ω .
- Dual band GSM/GPRS module: EGSM 900/ GSM1800;
- GPRS class 10; SMS cell broadcast.
- 3 years autonomy with 2 minutes communication every day with GSM/GPRS module.
- Typical acquisition: every second, with data memorization every minute.
- Power supply : either 5 or 12 V dc

The TDA3 unit is an electrical value remote measurement device designed to sample cathodic protection data of metallic structures (oil, gas, water transportation pipes, buried tanks, marine structures, and so on).

The TDA3 Unit is designed against SNAM Rete Gas SPA GASD C.07.05.03 dated 05/09/2005 specifications and is indicated to build up a cathodic protection monitoring system as requested by the most recent Italian and European standards. The unit is easily installable on field and is equipped with battery power supply ensuring some years of operation.

TDA3 Unit permits:

- To collect electrical measurements (two voltages, or one voltage and a current);
- Accurate analog to digital conversion of the acquired electrical values;
- Elaboration of the values: filtering, min, mean, max, and so on;
- Storage of recorded data;
- Requested data for cathodic monitoring are transmitted with GSM/GPRS network.

To optimize radio performance, it is recommended to house TDA3 units in standard plastic containers like "Conchiglia" (mod. SCF).

When set in standard mode, TDA3 transmits once a day a "resume" of the daily measurements indicating minimum, medium, maximum and other statistical data with reference to the actual standards.

The unit can also be set to record one value per second (max frequency) during 24 hours and to transmit the entire data stream to the control center.

Telemagnetica can supply a complete hardware and software system for the cathodic protection remote control, with data transmission based on wireless GSM/GPRS network. Remote control is entirely supported by CP Watch software (Cathodic Protection Watch).

The CP Watch software permits to carry out all needed operations to manage a network composed by a virtually infinite number of cathodic protection control devices (TDA3 and TDA4 units) and power supplies. The software runs with Windows 2000/XP/7/Vista operative systems and can be personalized under customer specifications.

Some typical examples of connection to the TDA3 unit are reported in the following page :

