



HYDROLOGIC WEATHER MONITORING STATIONS FOR REGIONAL CIVIL DEFENCE PURPOSES AND THEIR INTEGRATION IN THE SPECIALISED SOFTWARE PACKAGE FOR BUILDING YEARBOOKS AND FOR VALIDATING DATA

Hydrologic weather monitoring stations operating 24/7 and implementation of the data validation and weather and hydrologic yearbook display package

Supply: 2016/2017 | Region: Puglia | Sector: Civil Defence



CHALLENGE

Execution of several new stand-alone hydrologic weather monitoring stations integrated in Puglia's civil defence regional network.

WHY ETG?

The wealth of experience that ETG has acquired in the weather instrumentation sector and in real-time monitoring data acquisition, archiving, processing and circulation makes it a valuable collaborator.

INTRODUCTION

The new hydrologic weather stations installed starting from 2016 are inserted in Puglia's regional monitoring network. The network supplied, installed and configured by ETG for the Civil Defence of the Puglia Region is made up of over 170 hydrometric and pluviometric stations.

The network communicates through a regional radio backbone with UHF band loop coupling, consisting of 11 smart repeaters connected at high transmission speed to the Bari station.

The control station consists of 2 servers in hot reserve mode installed at the Bari operations centre to manage the entire system and for remote maintenance, and a system that alerts personnel on call through voice synthesis and data exchange with DPC in Rome.

ETG currently performs its maintenance.

SOLUTION

The newly supplied stations, installed by ETG for weather monitoring, are made up of specially made and selected sensors in order to be able to guarantee reliable environmental monitoring totally 24/7. These new stations are integrated in the UHF radio network and in the station application developed by ETG called WinNET7.

Not only does this application guarantee all of the functions of a management, display and traditional alarm system, it also is equipped with many specialised packages in the particular case of Puglia's civil defence system, amongst which the one concerning **yearbook production** proves crucial.

With this instrument, the time series of the daily and monthly values processed starting from the data collected by the automatic stations of the meteorological and hydrologic monitoring system will be presented.

Special **data validation** rules are also implemented on the same application in order to provide the customer with an additional tool for checking their plausibility and consistency.

BENEFITS

Having such a complete and well-structured monitoring system allows the customer to have data coming from hundreds of stations available 24/7 and to centralise them in a single database where they can be easily analysed and made available to the tasked operators.

The WinNET7 software, totally expandable based on the customer's stated requirements, was equipped with many specialised packages able to support the customer on the themes important to it.

As regards Puglia's system, the yearbook package previously described is particularly interesting. It is able to easily represent the time series of the hydrologic weather data.

As previously stated, this tool is crucial also because it permits automatic control through validation rules set on board the system and then manual validation performed by the authorised civil defence service personnel.

CONCLUSION

The Civil Defence system of the Puglia Region is particularly advanced in terms of hardware and software performance when compared to the national scene.

This is demonstrated by the completeness of the data monitored by the system and by their centralised management and use with the software platform made by ETG going by the trade name WinNET7.

Systems so complex, well-structured and aimed at protecting the territory and the citizens require ongoing development and maintenance work that only a company like ETG is able to guarantee.



Annali
Mario Rossi

Pluviometria / Termometria / Impostazioni / Soglie per Mese

Termometria

- Situazione
- Verifica
- Impostazioni
- Soglie per Mese

Soglie

Stazione				Sensore	
Acquaviva delle Fonti (103)				Temperatura Aria (°C)	
Minimo	Massimo	Minimo Giornaliero	Massimo Giornaliero	Tipo Validità	Mesi Validità
-20.00	20.00	-20.00	20.00	..	..
-15.00	30.00	-15.00	30.00	..	..
-10.00	40.00	-10	40.00	..	..
0	50.00	0	50.00	..	..

Adelfia (466)				Temperatura Aria (°C)	
Minimo	Massimo	Minimo Giornaliero	Massimo Giornaliero	Tipo Validità	Mesi Validità
-20.00	20.00	-20.00	20.00	..	..
-15.00	30.00	-15.00	30.00	..	..
-10.00	40.00	-10	40.00	..	..
0	50.00	0	50.00	..	..

Pluviometria / Situazione

Periodo

15 luglio 13 - 15 settembre 13

[Vedi](#)

Legenda

Adelfia (465)

luglio 2013

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

agosto 2013

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

settembre 2013

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

+ Avvia Nuova Validazione

Periodo

15 maggio 18 - 22 maggio 18

Stazioni seleziona tutte

[Avvia](#)

Validazioni in corso

Nessuna Validazione Presente