

Multiservice Technical Documentation – MTD 2014.3

Subject: PLATINUM Series Rectifiers' DUN through a VNC Viewer SW powered by



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Introduction

The purpose of this technical article is to bring to light the potential of DUN (Dial Up Networking) of rectifiers PLATINUM series in single and dual branch mode. This is a default function installed on all PLATINUM series models.

What is VNC?

VNC is a program created in 2002 and produced by the RealVNC™ company for PC's remote control & support and application virtualization. The proven reliability and a "user friendly" interface ensure this program to be also used in heavy work environment such as industry.

In HMI (Human Machine Interface) devices of the PLATINUM series, a VNC version has been coded so as to allow data inquiry and a total HMI remote control via network connection on TCP/IP protocol and to assign a static IP address.

That's the link of the RealVNC™ company: <https://www.realvnc.com/>

For a proper visualization of HMI PLATINUM series on your PC you have to download and use the free VNC VIEWER application. It is available for the most known operating systems and also for mobile devices such as smartphones and tablets.

You can download it from this link: <https://www.realvnc.com/download/viewer/>

Protected connection

The connection runs by starting the VNC VIEWER application on your PC or smartphone and typing the IP address of the PLATINUM rectifier as shown in Fig. 1.

The IP address of the HMI device can be changed by the user through the device itself: you don't need to call a service technician. Before running a connection to the HMI device, you will be asked for the security password: if you don't have it, no communication can be established (Fig. 1a).

Fig. 1

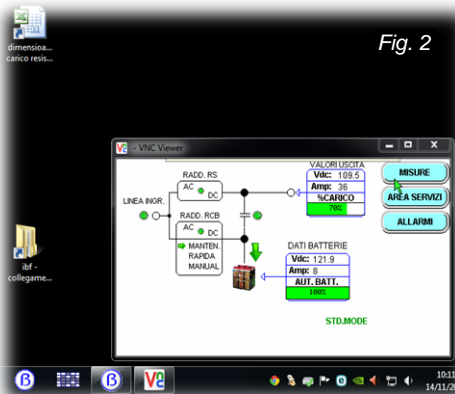
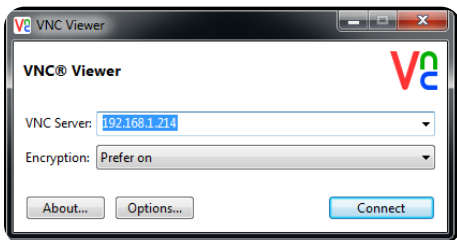


Fig. 2

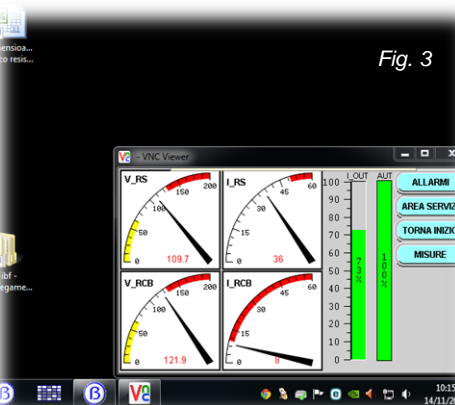


Fig. 3



Fig. 4

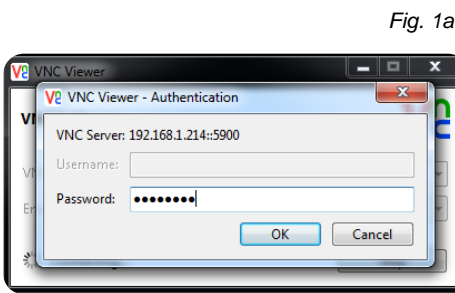


Fig. 1a

Access mode

Access, as we mentioned before, is password protected and can be done in two modes:

INQUIRY
(1st level password)

to view the HMI home page containing the system diagram, the status of each block and the values of all electrical characteristics (Fig. 2). In this mode you are not allowed to access the various menus available on HMI; since this section is very complete, you instantly can view the operational situation of the device.

CONTROL
(2nd level password)

You have full control of the terminal. You work as if you were in front of it. All functions on the HMI device - and thereby the whole system operation- can be controlled with a simple click of the mouse.

You can get the details of electrical measurements in the form of analog equipment (Fig. 3) with the operating limits of every section (red/yellow stripes into the devices). Moreover, the alarm history area (Fig. 4) can be seen so as to have a complete picture of the situation until now.

Limit user access

VNC VIEWER allows access to the remote device of the PLATINUM series to only one user at a time.

Conclusions

The system described in this article allows a complete control of the devices PLATINUM series in an absolutely cheap, non-invasive and effective way. It's ideal where a central monitoring system is not present, or where the new parameters' acquisition has a strong economic impact.

No dependence on Internet browsers. By assigning a public IP to the HMI device PLATINUM series, a safe access to the Technical Assistance Service of our company can be obtained; in this way, the rectifier can be remotely checked and, if necessary and according to any specific requirement needed after installation, corrective actions on parameters/functions available on the HMI device can be taken.