

Technical Reference

Capstone Remote Monitoring System (Maintenance Edition)

This document (plus the User Edition), presents the additional capability to monitor, control, and troubleshoot the MicroTurbine via the Capstone Remote Monitoring System (CRMS) software.

Chapter 5: Administrator Password Protection

This chapter presents an overview of the software communication features associated with CRMS and the Capstone MicroTurbine.

The MicroTurbine Controller provides two serial ports for remote communication:

- User Port (9-pin)
- Maintenance Port (25-pin)

The operator can use either the User Serial Port or the Maintenance Serial Port for communication with the Power Controller. For additional information, refer to Maintenance and User Serial Port Data and to the Capstone Protocol Converter section in the CRMS User Edition manual.

Administrator Password

The Controller Software provides Administrator Password Protection for remote and maintenance control operation. The Administrator Password can be entered and changed from the Administrator Password Protection Panel. See Figure 5-1.

The default password for both maintenance and user ports is as follows:

- Default User Password: **A4D5M6N!**

To open the Administrator Password Panel select **[Passwords] [Administrator Password]** from the MicroTurbine Menu Bar.

To change the default password, enter the current password, the new password, and then enter the confirmation password.

The MicroTurbine Controller defaults to the base password level after a period of inactivity.



Figure 5-1. Administrator Password Protection Panel

The CRMS program automatically sends a default password as soon as communication is established. In case of using a password different than the default password, a prompt will appear and request a new administrator password. You must then re-enter the same password each time CRMS is started.

The Power Controller provides User and Maintenance Prompts based upon the Password Level and the connected communication port. Refer to Tables 5-1, 5-2, and 5-3 for User, Maintenance, and CPC Port Prompt information.

Control Line Command Display

Control commands can be monitored and issued from the Control Line Command window. In order to display the Control Line Command display, select **[Communication] [Command Line]** from the MicroTurbine Menu Bar.

Within the Maintenance Edition of CRMS, the Control Line Command Display is not accessible when any of PM Write, PM Read, or Configuration panels are opened.

Table 5-1. User Port Prompts

Prompt	Description
USR>	Lowest protected level, data acquisition only
USRPR>	User's protected level. User's protected password required for User's data acquisition and control access level.
USRADM>	Administrator protected level. Administrator password required for Maintenance data acquisition and administrative control access level.

Table 5-2. Maintenance Port Prompts

Prompt	Description
MNT>	Lowest protected level, data acquisition only.
MNTPR>	User's protected level. User's protected password required for User's data acquisition and control access level.
MNTADM>	Administrator protected level. Administrator password required for Maintenance data acquisition and administrative control access level.

Table 5-3. CPC Port Prompts

Prompt	Description
CPC>	Lowest protected level, data acquisition only.
CPCPR>	User's protected level. User's protected password required for User's data acquisition and control access level.
CPCADM>	Administrator protected level. Administrator password required for Maintenance data acquisition and administrative control access level.

Send Password

The Admin Level password is automatically sent to the MicroTurbine upon communication connection through CRMS. Sending this password transfers command control of the MicroTurbine to CRMS. This assignment may cause problems when a User Level operator is also on the system.

To remove the (default) automatic transmission of the administrator password to the system, select **[Settings][Send Password]** from the Windows menu bar and toggle off the "Automatically send" check box.

This action will allow the User Level operator to complete actions from the display panel or PC while a Maintenance operator is viewing screens in Monitoring mode.



Figure 5-2. Send Password Panel