

Nucleus X-700 is the heart and soul of IoT/M2M solutions, offered by 4CWireless. It identifies remote equipment by the specified unique Device-ID and can be viewed on the software identifying their names, parameters, location. The remote site is dynamically colored to reflect the status of the site. To further improve operator recognition, an audible and visual alarm may be enabled which can be configured to remain active until the receipt of the alarm has been acknowledged. Remote equipment data points are time-stamped and logged to the memory chip on Smart-Card and then sent to the server periodically on a scheduled scan.

Key Features

- **Configuration of Smart-Card Remotely**

User can configure or send a built-in command to Smart-Card via GSM network remotely:

- Get Device Info
- Get Data Logged
- Get Data Current
- Get Data Date Time
- Get/Set Scan Time
- Get/Set Date Time
- Disconnect Site
- Synchronize Date Time
- Update Firmware
- Set Notify Alarm To Server
- Reset Controller
- Get/Set Communication Mode
 - Online Mode -> Always Connected
 - Wake up on Scheduled Scan Time
- Go Offline (Turns off modem)
- Get/Set Equipment Type
- Get/Set Equipment Password
- Get/Set Modem Reset time
- Get/Set Modbus Register Settings
- Get/Set Modbus Registers Count
- Get/Set Modem Reset Time (Minutes)

- **Customization:**

User can customize the application to:

- Add/Delete/Modify a type of device
- Select any parameter to be shown on the main screen (site status), graph or report.
- Provide a Name/Unit to an input of Smart-Card.
- Calibrate an input parameter up to a 3rd order equation.
- Change the format of the input parameter, (e.g. number of decimal places)
- Sequence of the input parameter on the main screen
- Color of the input parameter on the graph.

- **Manage Clients:**

- Add/Delete/Modify a client/organization.
- A root group is created and assigned to the newly created client/organization.
- The client/organization icon then appears in the tree of site-groups.
- Under the client/organization, almost up to an infinite number of groups can be added to organize remote equipment hierarchically under them.
- In the case of a large and single organization, a root client is created and then all the users of the system are restricted to create a new client/organization by the user management screen.

- **Alarm Notification Alerts (Buzzer/Popup Message):**

- On each scan of the Smart-Card, alarm configurations are checked, and if found, a beep is played and an alert balloon notification is displayed.
- A complete history of alarms is logged to generate alarm report for particular device, or for a particular alarm.
- Once an alarm is created, it can be configured on any number of the remote devices with the same configuration parameters or with the different alarm parameters for particular remote equipment.

- **Alarm Notification Groups Management (SMS/Email Alerts):**

- Alarm groups can be managed separately.
- Every alarm group can have its own users to response on particular alarms/alerts.
- An alarm group can have multiple sites (remote equipment) under it whose alerts can be sent to the user of that group via SMS or email.
- A group can be configured for either SMS or Email or both of the alerts.

- **Site Groups:**

The system is capable of managing sites under groups. The application also gives user a simple and user friendly options to handle groups, such as:

- Groups can have sub-groups.
- User can Add/Delete/Modify groups and sub-groups
- Each Group shows the total number of sites assigned to that group on the main screen.

- **Login Users - Multiple Authentication Levels (Rights and Roles)**

A must have feature in any Management System is to assign different users, rights and roles. With SMCS it is available with such an easy yet very deep digging way. It includes:

- Add/Delete/Modify a user.
- Assign user a role, (i.e. Admin, Security, Technician etc.)
- Add/Delete/Modify Roles as well.
- Assigning Rights to different Roles. (Current version supports 20 rights, with even having option to either assign a role to Start/Stop the server communication.)

- **Disconnection Alert**

An automated disconnection alert is sent to the Support group when a remote site is disconnected from server for more than two hours (time can be programmed).

- **Auto Reboot Remote Sites Via SMS**

An automated SMS service reboots remotely installed system via SMS in case the system remains disconnected from Footprint for more than two hours (time can be programmed).

- **Software Interfaces**

- Desktop
- Web Interface

Screen Captures:

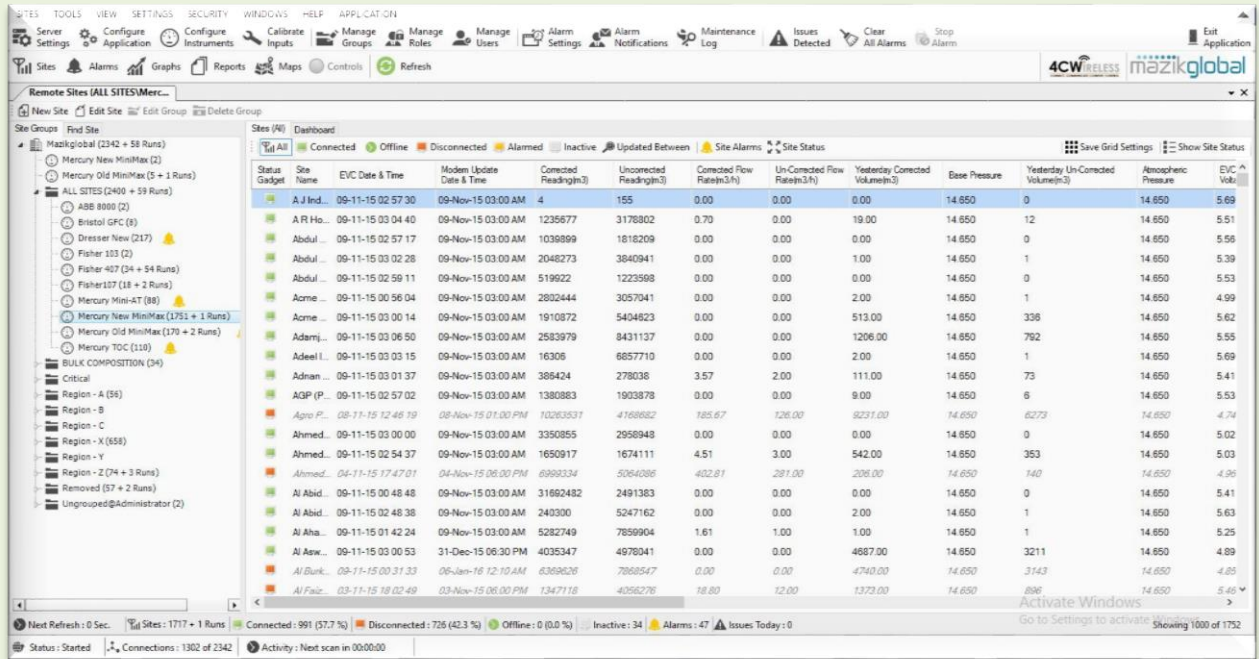


Figure 1 : Remote Site Status

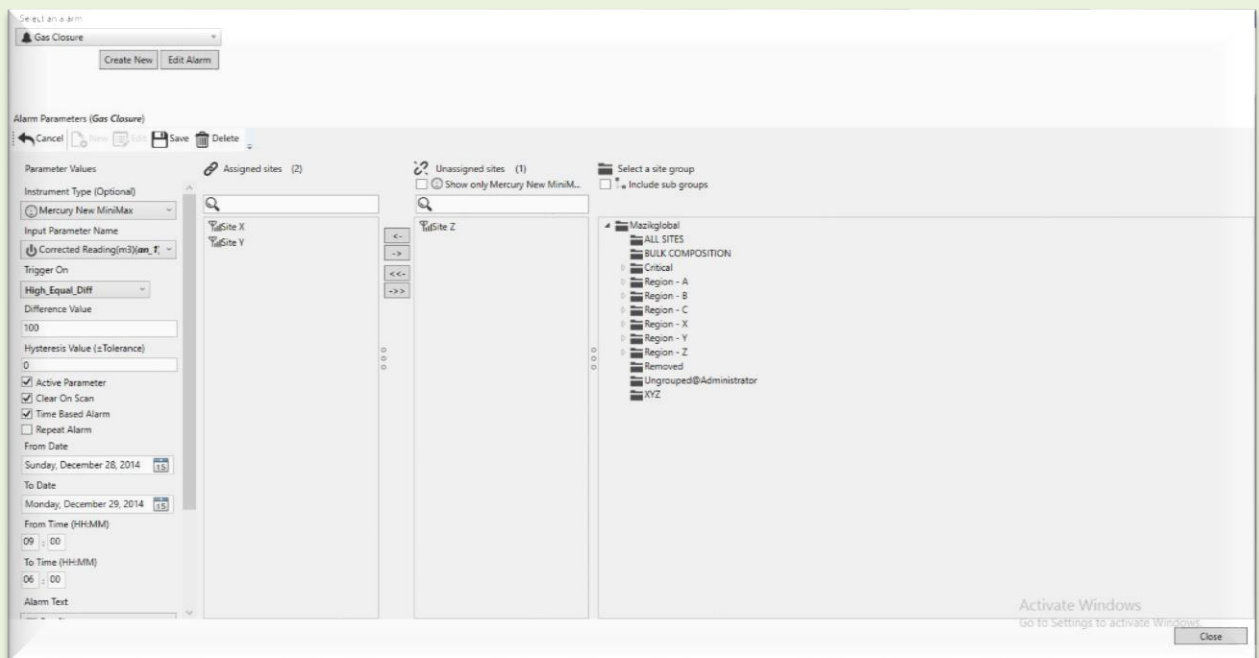


Figure 2 : Alarm Configurations

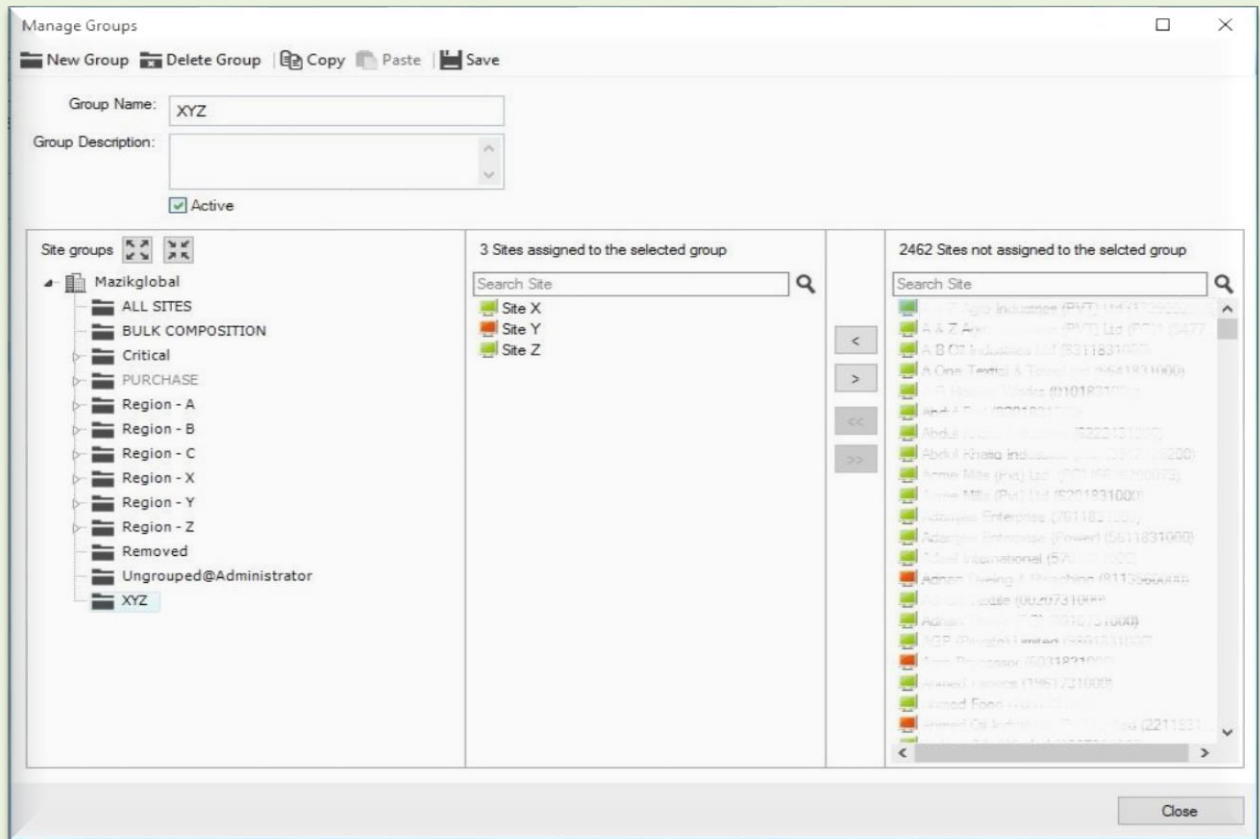


Figure 3 : Manage Groups

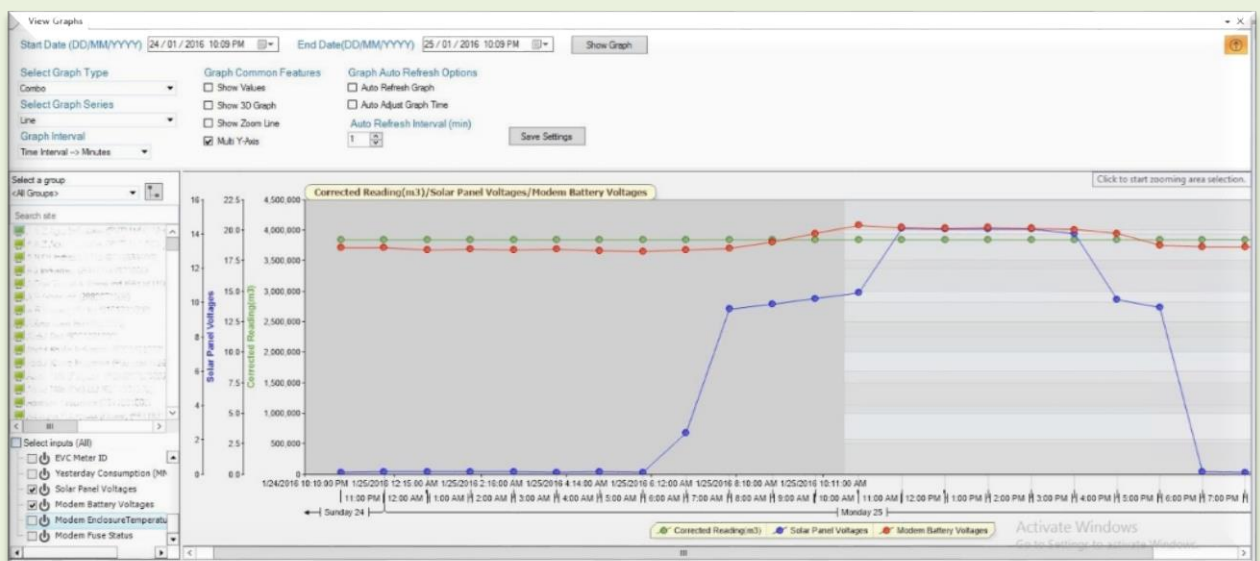


Figure 4 : View Graphs