

LSGAM Software

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What is LSGAM?

- ❖ Configured for operation with other companies systems and online service
- ❖ Used offline as a local application storing information on the desktop/laptop computer
- ❖ Use of the GEM5000 or GEM200 out of the box without software does not allow the user to generate flow rate values, select comments or select IDs with the instrument and prevents downloading of readings to the computer.
- ❖ Display GEM Information
- ❖ Project Setup
- ❖ Set up Id's
- ❖ Download readings
- ❖ Change Units of Measure
- ❖ Export data to Excel



Connecting LSGAM to the Instrument

- ❖ Communication Connections is done by setting up drivers for the USB Serial communications or Configuring Bluetooth Serial communications.
- ❖ The Instrument must be powered ON and in the Gas Reading screen
- ❖ Launch the LSGAM software by clicking on the icon on your desktop
- ❖ Once the software is installed on your computer with an internet connection this instrument communications program has Auto application updates. This enables you to always have the most current version of the LSGAM software.

Connecting to LSGAM...Cont

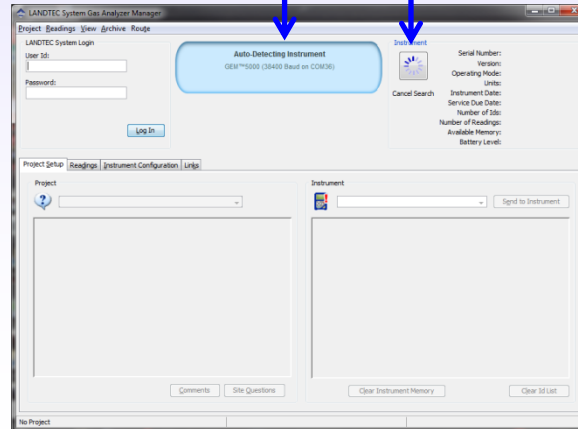
1. Power on Unit and place in Gas Reading Screen



2. Simple Connection

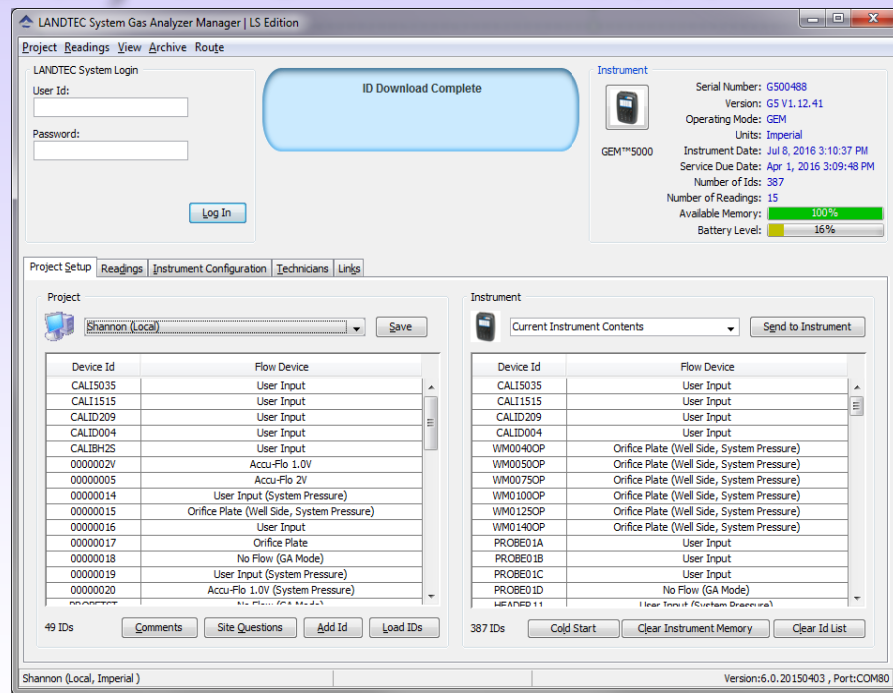
3. Open LSGAM Program

4. Automatic Connection



Once Connected, Now what?

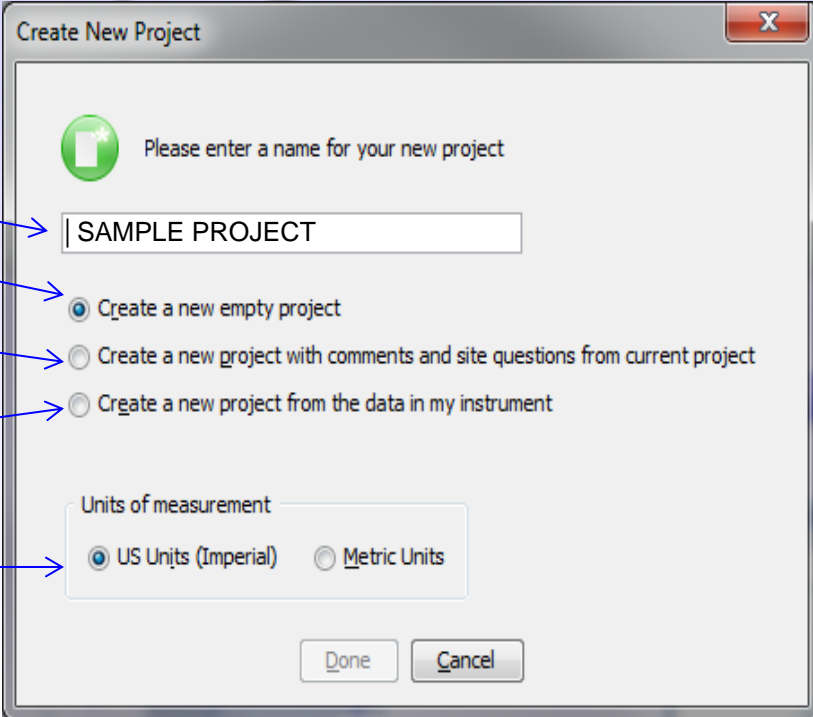
- ❖ GEM Info Displayed
- ❖ Current Instrument Contents
- ❖ Projects
- ❖ Download/Import Readings
- ❖ Instrument Settings/Configuration
- ❖ Add ID's/Projects/Comments and Questions



Create a new project

Project Setup

- ❖ Name Project
- ❖ Create a new empty project
- ❖ Create a new project with comments and site questions from current project
- ❖ Create a new project from data in my instrument
- ❖ Units of Measure (UOM)



The screenshot shows a 'Create New Project' dialog box. It has a title bar with a close button (X). The main area contains a green icon with a plus sign and the text 'Please enter a name for your new project'. Below this is a text input field containing 'SAMPLE PROJECT'. There are three radio button options: 'Create a new empty project' (selected), 'Create a new project with comments and site questions from current project', and 'Create a new project from the data in my instrument'. Below these is a 'Units of measurement' section with two radio buttons: 'US Units (Imperial)' (selected) and 'Metric Units'. At the bottom are 'Done' and 'Cancel' buttons. Blue arrows from the list on the left point to these elements: 'Name Project' points to the text input field; 'Create a new empty project' points to the first radio button; 'Create a new project with comments and site questions from current project' points to the second radio button; 'Create a new project from data in my instrument' points to the third radio button; and 'Units of Measure (UOM)' points to the 'US Units (Imperial)' radio button.

Create New Project

Please enter a name for your new project

SAMPLE PROJECT

☒ Create a new empty project

☐ Create a new project with comments and site questions from current project

☐ Create a new project from the data in my instrument

Units of measurement

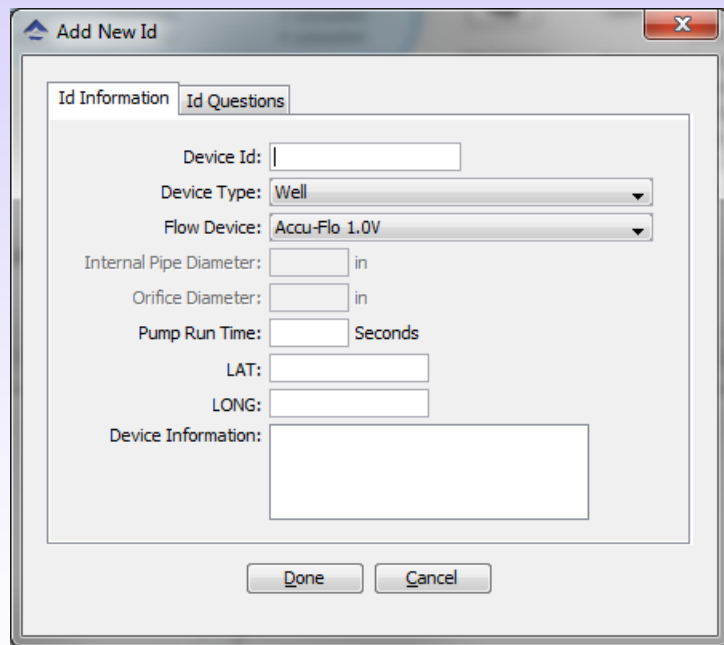
☒ US Units (Imperial) ☐ Metric Units

Done Cancel

Create a new ID

Add New ID

- ❖ Device ID must be 8 characters
- ❖ Choose Device Type
- ❖ Choose Flow Device (i.e. Orifice Plate, Accu-Flo)
- ❖ Input Pipe and Orifice Diameter if Required
- ❖ Input Pump Run Time
- ❖ Enter GPS Coordinates if Applicable
- ❖ Device Information



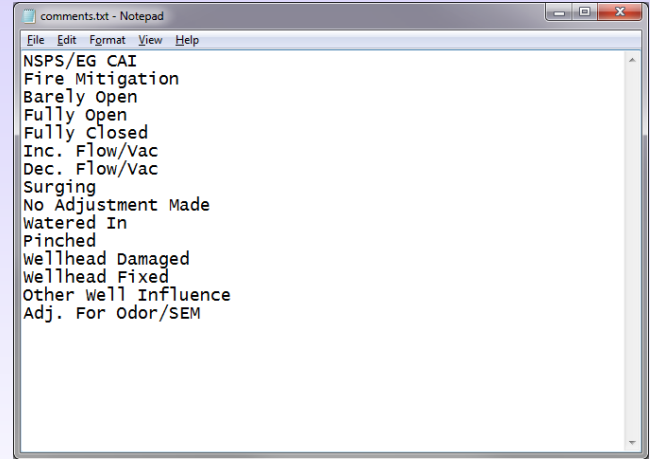
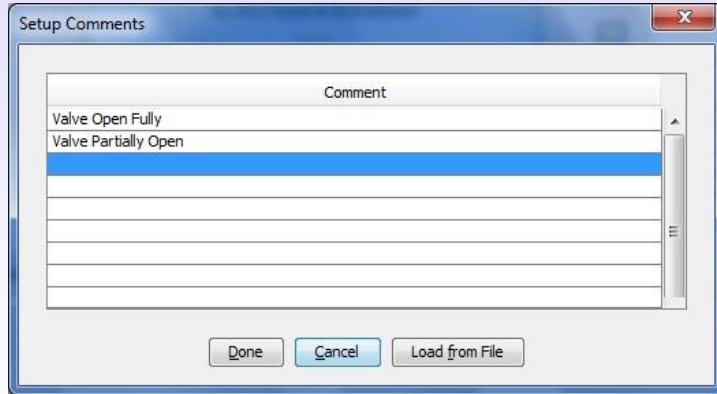
The screenshot shows a software dialog box titled "Add New Id" with a close button (X) in the top right corner. The dialog has two tabs: "Id Information" (selected) and "Id Questions". The "Id Information" tab contains the following fields:

- Device Id: A text input field.
- Device Type: A dropdown menu with "Well" selected.
- Flow Device: A dropdown menu with "Accu-Flo 1.0V" selected.
- Internal Pipe Diameter: A text input field followed by "in".
- Orifice Diameter: A text input field followed by "in".
- Pump Run Time: A text input field followed by "Seconds".
- LAT: A text input field.
- LONG: A text input field.
- Device Information: A large text area.

At the bottom of the dialog are two buttons: "Done" and "Cancel".

Set Up Comments

- ❖ Set up comments in either LSGAM or Import Comments from Notepad



Send ID's to the Instrument

Once IDs have been created in the project, they must be uploaded to the instrument. To perform this operation, select the desired IDs from the left hand table under the Project name (computer side), left click and hold while dragging the IDs to the right hand table and release the mouse button. This action is known as a “Drag & Drop”.

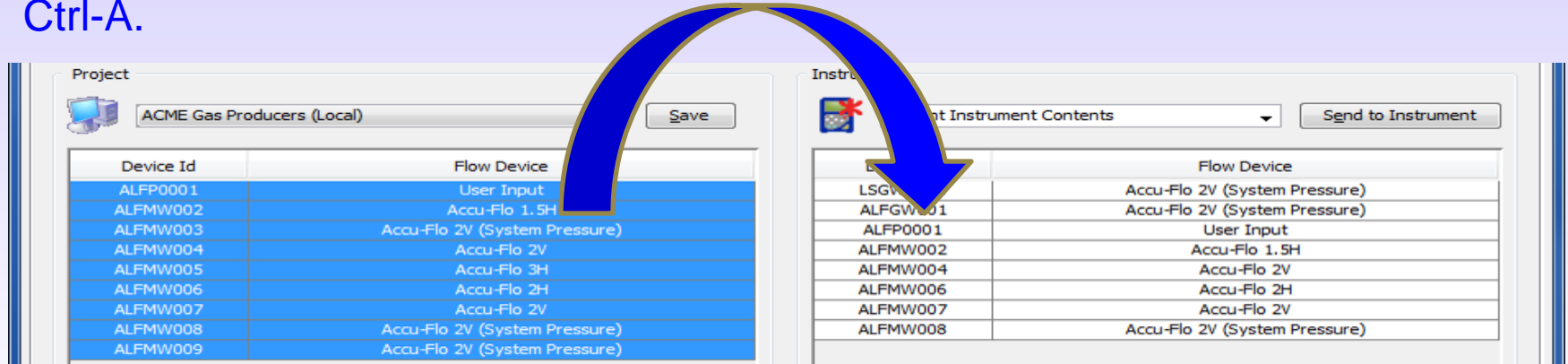
Three basic methods of selecting IDs exist.

- ❖ Select Specific ID(s)
- ❖ Select a Range of IDs
- ❖ Select All IDs

Send ID's to the Instrument

Selecting All IDs

- ❖ All IDs can be selected by selecting one ID in the Project window and then pressing Ctrl-A.



- ❖ Now move IDs from the Project Side to the Instrument Side by dragging and dropping them. Click on the  button to send these IDs to the instrument.

Data Management

- ❖ After successfully creating projects, ID's, and setting appropriate instrument settings, the instrument is now reading for field use.
- ❖ When used in the field, readings are collected and stored within the instruments memory.
- ❖ These readings must be downloaded from the instrument to be reviewed on the computer and stored for review at a later time.
- ❖ The readings consist of the measured, input, and calculated parameters such as CH₄, CO₂, O₂, Gas Temperature, Flow Rate, etc.

Data Management

- ❖ To view your readings from the instrument, select the Readings tab of the LANDTEC System Gas Analyzer Manager software. Then click on the Get Readings button.

LANDTEC System Gas Analyzer Manager | LS Edition

Project Readings View Archive Route

LANDTEC System Login

User Id:

Password:

Log In

ID Download Complete

Instrument

GEM™5000

Serial Number: G500038
Version: G5 V1.02
Operating Mode: GEM
Units: Imperial
Instrument Date: Feb 23, 2012 8:32:57 PM
Service Due Date: Jan 1, 2011 12:32:17 PM
Number of Ids: 0
Number of Readings: 0
Available Memory: 100 %
Battery Level: 56 %

Project Setup Readings Instrument Configuration Links

September 18, 2009 3:50:32 PM PDT [175]

Get Readings Post Readings Export Readings Clear Instrument Readings

Device Id	Date Time	CH ₄	CO ₂	O ₂	Comments	Project	Posted
AUTO-LOG	9/18/09 3:53 PM	0.4	0.1	20.0		<No Project>	
AUTO-LOG	9/18/09 3:54 PM	0.4	0.1	20.0		<No Project>	
AUTO-LOG	9/18/09 3:55 PM	0.4	0.1	20.0		<No Project>	
AUTO-LOG	9/18/09 3:56 PM	0.4	0.1	20.1		<No Project>	

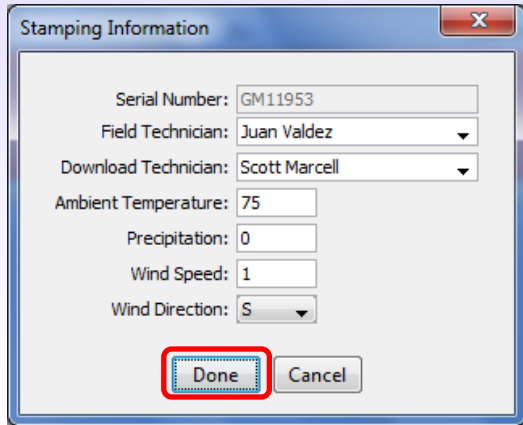
Online Project Local Project Unknown Project Duplicate Reading

ACME Gas Producers (Local)

Version: 5.0.0 , Port: COM2

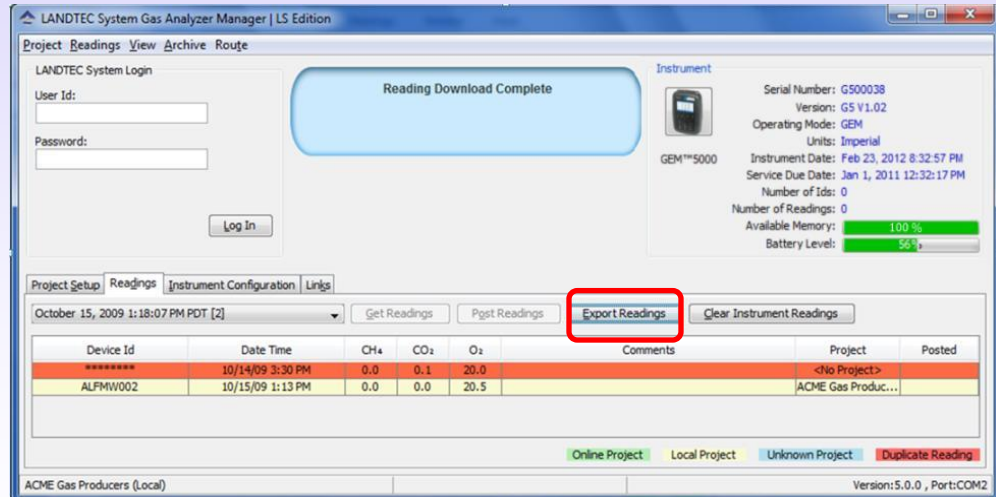
Data Management

- ❖ To export the readings to a file, click the **Export Readings** button
- ❖ This will open the Stamping Information Screen. Stamping information are details that are most often stored with the historical data but not directly stored by the instrument.



The Stamping Information dialog box contains the following fields and controls:

- Serial Number:
- Field Technician:
- Download Technician:
- Ambient Temperature:
- Precipitation:
- Wind Speed:
- Wind Direction:
- Buttons: **Done** (highlighted with a red dashed box) and Cancel



The main application window shows the following components:

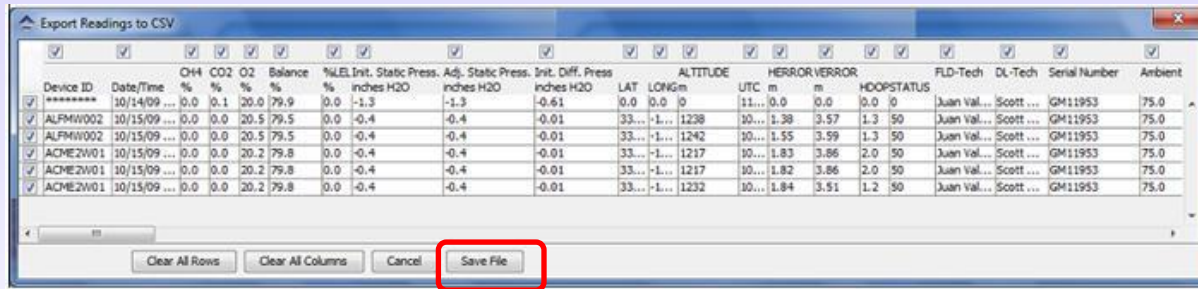
- Project Readings View Archive Route tabs
- LANDTEC System Login section with User Id and Password fields and a Log In button.
- Reading Download Complete status message.
- Instrument information for GEM™5000, including serial number G500038, version G5 V1.02, and various status metrics like available memory (100%) and battery level (55%).
- Project Setup Readings Instrument Configuration Links tabs.
- Export Readings button (highlighted with a red box).
- Table of readings with columns: Device Id, Date Time, CH4, CO2, O2, Comments, Project, and Posted.
- Footer showing ACME Gas Producers (Local) and Version: 5.0.0, Port: COM2.

Device Id	Date Time	CH4	CO2	O2	Comments	Project	Posted
*****	10/14/09 3:30 PM	0.0	0.1	20.0		<No Project>	
ALPMW002	10/15/09 1:13 PM	0.0	0.0	20.5		ACME Gas Produc...	

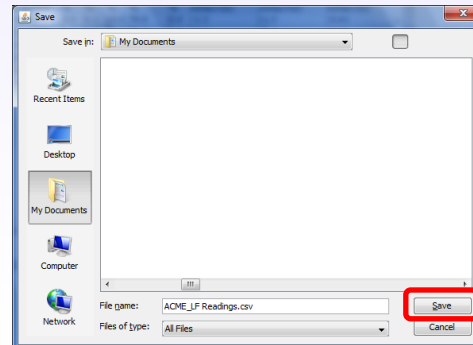
- ❖ Clicking on Done will open the **Export Readings to CSV** screen.

Data Management

- ❖ Click the Save File button to save to your computer which will open a Save window.



- ❖ Create a file name and click SAVE



- ❖ Once saved open the file with Microsoft Excel

[illegible]



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