

# General Specifications

## Model NTPC044 Exaquantum Electronic Logbook



### GS 36J40E50-01EN

#### ■ INTRODUCTION

Exaquantum Electronic Logbook (eLogBook) is a quick to configure, standalone product that replaces paper log books or custom solutions resulting in a substantial increase in productivity and information sharing throughout the plant or process areas.

The eLogBook Web user interface allows non-automated events and process data to be manually entered as eLogBook 'logs', allowing easy access to relevant people and departments.

Once an event is logged, supervisors can view entries and issue instructions or enter comments to a log to assist problem resolution.

Follow-up actions can be tracked to completion, giving managers the assurance that instructions or corrective activities are not overlooked.

eLogBook provides a report for supervisors and managers to view log statistics, user activity and data analysis over a user selected date and time range. Custom reports can also be created to address specific users' requirements.

Since all eLogBook information is centralized, statutory health and safety requirements for the traceability of actions before, during and after incidents can be satisfied.

eLogBook is an appropriate way to increase the awareness of what is happening in the plant, improving communication between all departments while providing a consistent method of operation.

#### ■ BENEFITS

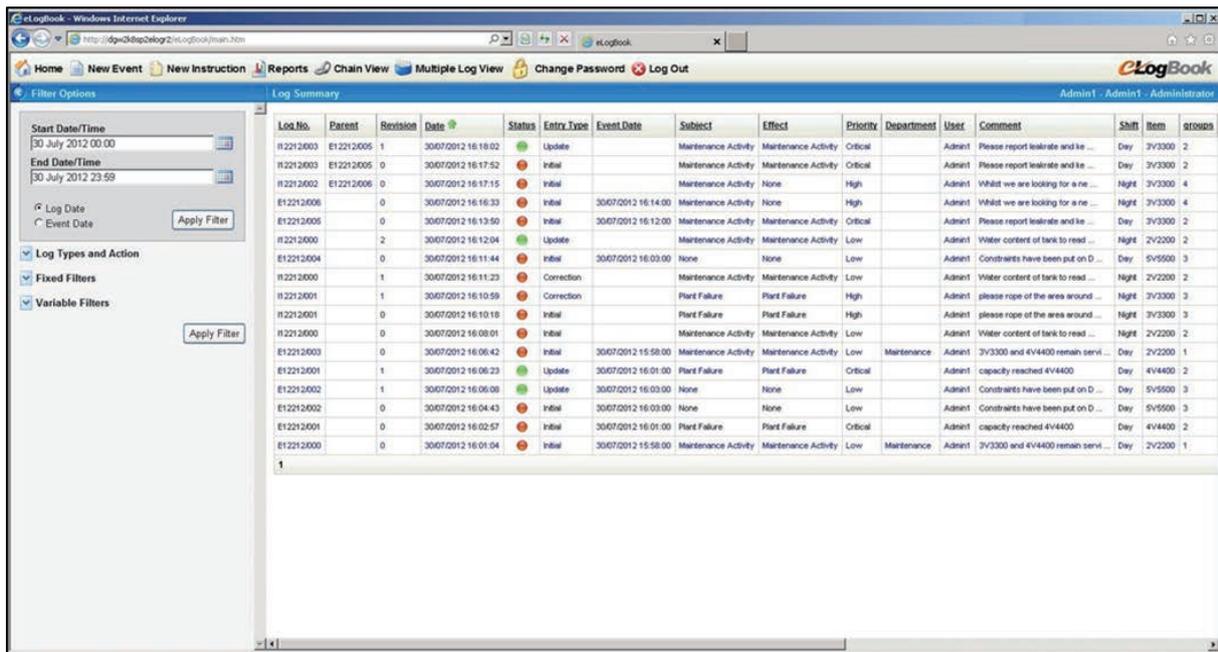
eLog Book benefits includes:

- Improved shift and department communications
- Enhanced incident analysis
- Superior follow-up action tracking
- Faster decision-making
- Powerful query capabilities and analysis reports
- Relevant users made aware of events rapidly via the eLogBook automatic annunciation system
- Directed follow-up management
- Identify often failing equipment
- Full audit trail of all entries and adjustments

#### ■ KEY FEATURES

eLogBook feaures includes:

- Records non-automated events and process data
- Supervisor instructions
- Fixed filters provided for Subject, Effect, Priority Department, User and Comments
- Up to twelve (12) additional configurable filter categories available
- Generate e-mails, SMS and mobile-phone alerts
- Custom reports
- User group definition and permissions management
- Able to insert events generated from external sources
- Web client interface is foreign language configurable
- Simple to use
- Minimal training



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Figure 1 eLogBook Web Client Overview Screen

## ■ OVERVIEW

eLogBook provides the electronic equivalent of a paper-based logbook to record plant events and issue instructions.

An event is a significant occurrence that results in an operator creating an eLogBook Log, i.e. an event is logged into eLogBook by an operator.

An eLogBook instruction log can be created or added to an existing log to assist with problem resolution.

Logs can be retrieved, filtered and sorted so that only logs of interest are displayed.

eLogBook comprises the following components:

- eLogBook Web Client
- eLogBook Administration
- eLogBook Engine.

### ● eLogBook Web Client

All eLogBook users are uniquely identified when they create or edit logs, but their permission to do this is controlled by the user group they belong to. Each group may be allowed to create various types of information on particular mixes of fields. For example, an Operations Manager might be allowed to view all logs, but may only be allowed to change the priority of instructions where the subject field was set to 'Maintenance'.

Typical groups include:

#### Operators

- Event entry
- Schedule operator actions
- Update logs & follow-ups

#### Operations Management

- Issue instructions
- Promote/demote the priority
- Close logs
- Analyze reports

#### Maintenance

- Log a change in equipment status
- Update repair logs
- Close repair logs.

The eLogBook Web client provides access to the following screens:

#### Overview (Home) Screen

Allows logs to be viewed, filtered and sorted.

#### New Event Screen

Allows an authorized user to create a new log.

#### New Instruction Screen

Allows an authorized user to create an instruction, which may be attached to a selected log.

#### Reports Screen

Allows a user to select a report to view from a list of categorized reports.

#### Chain View Screen

Allows a user to display (and print) the selected group of logs within a parent-child relationship format.

#### Multiple Log View Screen

Allows a user to display (and print) detailed log information for the selected group of logs on one screen.

#### Change Password Screen

Allows a user to change their password.

### ● eLogBook Administration

The eLogBook administrator is used to configure and administer eLogBook.

- The 'Fixed Fields' tab provides access to the Priority, Subject, Effect and Department fields. The configured information is available for selection by users in drop-down menu when logs are created.
- The 'Variable Fields' tab allows up to twelve Customer designated custom fields to be defined and selectable by users in drop-down menu when logs are created. Typical use for these fields includes lists of Units, Equipment, Products, Shifts, etc. Fields can be configured for parent-child relationships so that, for instance, a different list of Equipment is displayed for each Unit selected by a user.
- The 'Parameters' tab allows the configuration and administration of additional data to be entered and stored with logs. For example, if the value 'Maintenance' is selected in the Subject field then configured data such as Work Order number can be entered when allocated.
- The 'Security' tab controls Users, User Groups and access permissions.
- The 'General' tab allows the configuration and administration of the Subject line of any emails sent by eLogBook.

### ● eLogBook Engine

- The eLogBook Engine can be configured to provide:
- Email generation for log alerts sent via an SMTP mail server.
- eLogBook Activity and Error display screens.

### ■ CREATING LOGS

The New Log Entry screen is used for the initial entry and subsequent update of logs by users with the appropriate privileges. The fields are as follows.

- Entry Type – Indicates whether the Event or Instruction is either an Initial, Update or Correction.
- Log Date – Date and time of the log was created or updated.
- User – The user that created or updated the log.
- Log No. – The assigned log number.
- Revision number – Automatically created when a log is created and incremented every time a log is updated. All revisions are accessible.
- Parent – Contains the log number of the parent log.
- Event Date/Time – Time when the event occurred.
- Priority – Selected from the drop-down menu.
- Subject – Selected from the drop-down menu.
- Effect – Selected from the drop-down menu.
- Status – Either 'open' or 'closed'.
- Comment – Contains free-format comments.
- Department – Selected from a configured list to allow the selected department to follow up the log.
- Email – Will be sent to the selected department if this option is selected.
- Repeat every – An email will be sent at regular intervals based on the number of minutes chosen from the drop down list.
- Acknowledge stops repeats – Allows an eLogBook email recipient to stop repeating emails being sent.
- Email acknowledge – Allows a user to acknowledge any emails sent regarding the relevant log.
- CC to – Allows a user to send a copy of any emails to other departments as well as the one chosen in the Department drop-down list.
- Action – Used to specify which users and departments are to be made aware of the log. The priority or time for completion of the log can also be specified.
- Additional fields – Twelve additional customer defined pull-down menus (e.g. shift, item, groups, etc.) can be configured. The list items in these fields (the context) can be used as part of the filtering and ordering process used for analyzing logs.

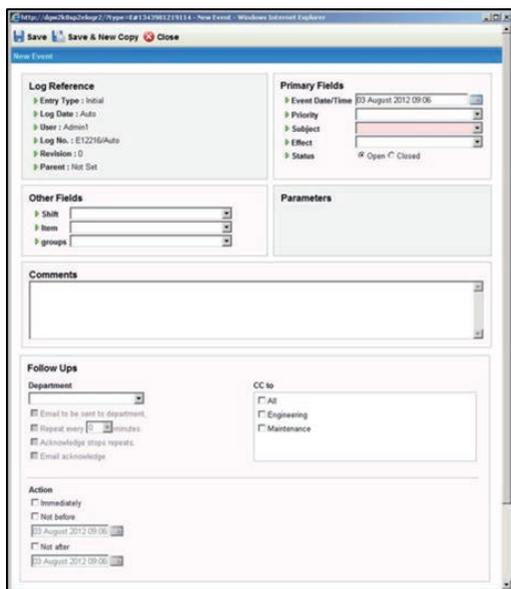


Figure 2 New Log Entry Screen

### ■ VIEWING LOGS

The Overview (Home) Screen displays logs based on the user selected filters. All logs have numerous associations (for example the operator who created them, a timestamp, plant item, previous related events, etc.) that are also recorded.

Particular logs may be configured to require specific additional data to be input, for example a shipment log may require the registration plate of the truck and the name of the driver, a maintenance instruction may require a torque setting for a securing bolt. These data fields can be configured for either mandatory or optional input and are displayed when matching logs are created or selected.

The chronologically ordered log is utilized for information exchange between shifts. As all log information is held in a relational database, it is easy for authorized users to track and analyze plant problems by entering the relevant filters.

### ■ REVISING LOGS

A log can be revised as more information becomes available. Revising with additional data does not update the log revision number. However, the name of the most recent editor of the additional data is always maintained.

Corrections (i.e. changes to the descriptive log fields) can be made by authorized users where all corrections are marked as such and recorded in the eLogBook audit trail.

### ■ REPORTS

A report is provided for the analysis of logs. The report, which can be saved or printed, contains Basic Statistics, Overall Activity, User Activity, Status Analysis and Persistence Analysis. The report can be filtered by User Group, User, Subject, Effect, Priority, Department, Start Date and End Date.

Chain View reports can be requested that show the parent-child relationship within logs.

Multiple Log reports can be requested that list logs on the same screen, allowing effective incident analysis. By specifying the start and end times plus the relevant query criteria (for example the equipment, priority and shift), eLogBook can retrieve all matching logs for display and analysis.

Custom reports can be created by authorized users and accessible by users. These reports can be displayed on demand and scheduled for emailing.

### ■ EXAQUANTUM EVENT HANDLER

Exaquantum events are generated from either OPC AE data or from Exaquantum calculations. The Event handler has the ability to automatically create a log in eLogBook directly from these events.

## ■ OPEN INTERFACE

The eLogBook Open Interface provides an API (Application Program Interface) to:

- Allow applications to enter logs into the eLogBook database, including emailing to named departments.
- Allow applications to access the eLogBook database to view logs.

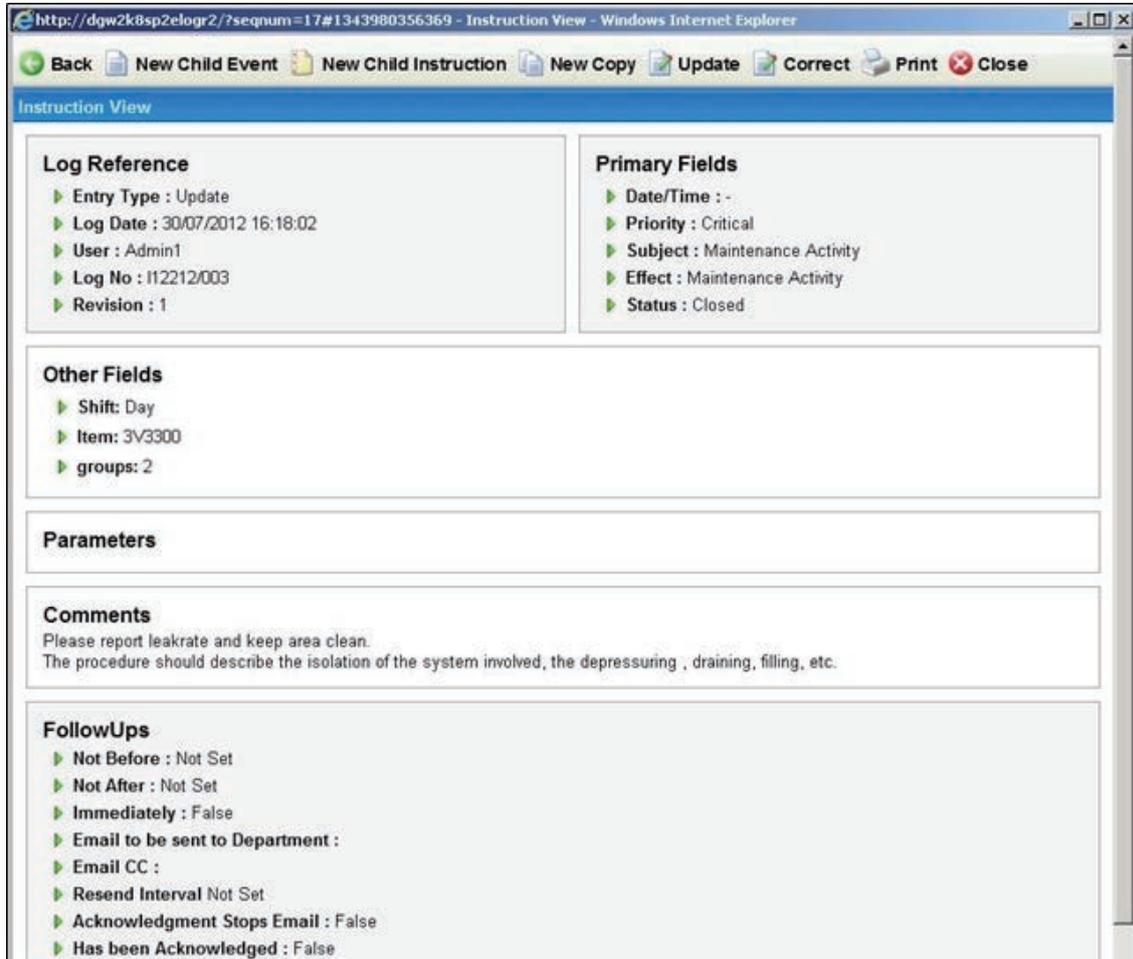


Figure 3 Log Summary View

## ■ HARDWARE AND SOFTWARE REQUIREMENTS

### Minimum Hardware and Software Specifications

Component	Minimum Hardware Specifications
eLogBook Server	2.2 GHz multi-core processor 2 GB RAM 40 GB disk
eLogBook Web Server (*1)	2.2 GHz multi-core processor 4 GB RAM 18 GB disk
User PCs	Internet Explorer 9, 10 or 11

Component	Software Specifications
eLogBook Server	<Operating Systems> Windows Server 2012 R2 Standard Windows Server 2012 Standard Windows Server 2008 R2 Standard 64-Bit SP1 Windows Server 2008 Standard Edition with SP2 SQL Server 2008 R2 SP1 32-Bit SQL Server 2012 SP1 32-Bit SQL Server 2012 SP2 64-Bit
eLogBook Web Server (*1)	<Operating Systems> Windows Server 2012 R2 Standard Windows Server 2012 Standard Windows Server 2008 R2 Standard 64-Bit SP1 Windows Server 2008 Standard Edition with SP2
User PCs	Internet Explorer 9, 10 or 11

\*1: A dedicated web server may be required dependent on the total number of concurrent Web users. Please contact your local Yokogawa office for assistance.

eLogBook can be installed on a fully operational Exaquantum PIMS (Plant Information Management System) server.

This package can be used without Exaquantum being installed.

## ■ MODELS AND SUFFIX CODES

### eLogBook Product

		Description
<b>Model</b>	NTPC044	eLogBook Product
<b>Suffix Codes</b>	-S	Basic Software License
	1	New Order (with Media)
	1	Always 1
	-SV□□	Enter the number of eLogBook Server Licenses (01 - 99)
	-YYYY	Select an Option Code
<b>Option Codes</b>	/WS□□	Enter the number of eLogBook Per-Seat Web Client Licenses (01 - 99)
	/WC□□	Enter the number of eLogBook Concurrent Web Client Licenses (01 - 99)
	/EE□□	Enter the number of eLogBook External Interface Licenses (01 - 99)

For eLogBook concurrent Web Client licenses, an embedded SQL Server 2012 processor license must be purchased suitable for the server hardware specification. Please contact Yokogawa to obtain the price of a SQL Server processor license that will require the provision of the server specification.

### Maintenance Service for eLogBook

		Description
<b>Model</b>	SV3NTMC044	Maintenance Service for eLogBook
<b>Suffix Codes</b>	-S	Annual Contract
	1	Always 1
	1	Always 1
	-SV□□	Enter the number of eLogBook Server Licenses (01 - 99)
	-YYYY	Select an Option Code
	-N	New
	-R	Renewal
<b>Option Codes</b>	/WS□□	Enter the number of eLogBook Per-Seat Web Client Licenses (01 - 99)
	/WC□□	Enter the number of eLogBook concurrent Web Client Licenses (01 - 99)
	/EE□□	Enter the number of eLogBook External Interface Licenses (01 - 99)

## ■ ORDERING INFORMATION

Specify model and suffix codes.

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