

The Enabler

ITL

An international forecourt integration component for Oil Companies and retail automation vendors

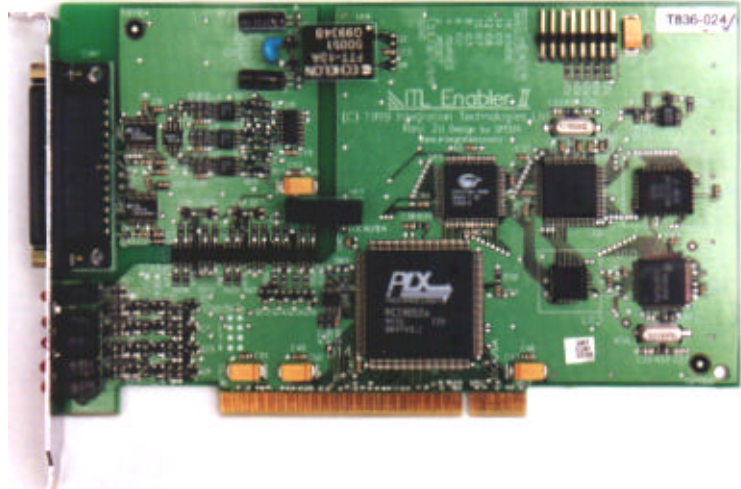
Overview

The Enabler 2 is an enhanced version of the tried and proven Enabler design. It provides a standard PCI format card with an increased number of output channels for forecourt control.

It is built upon the new industry standard PCI format hardware and Windows NT™ component based software and provides simple integration into a Host site system through the use of an ActiveX "layer".

Key features include:

- ❑ PCI format standard card
- ❑ Windows NT™ drivers and ActiveX Service Objects
- ❑ Comprehensive Developer's documentation set
- ❑ IFSF support built in – hardware & software
- ❑ Supports growing range of international forecourt protocols
- ❑ Cost effective for small and large systems
- ❑ ODBC support for database access
- ❑ Fully compliant ActiveX controls
- ❑ OEM specified
- ❑ Fully isolated circuitry
- ❑ High reliability SMT manufacture
- ❑ Internationalised software – language/locale aware



Enhanced Functionality

The Enabler 2 hardware is coupled with Enabler Version 2 software to provide enhanced functions including:

- Tank reconciliation
- Graphical tank status
- Logical tank support
- Forecourt Attendant (full serve) mode
- Off line deliveries
- Drive Off warning
- Blender pump support

Design

The Enabler 2 provides a high level and straight forward approach to integration for system vendors. It is designed to remove much of the concern about the special knowledge of the forecourt that is normally required.

SMT (Surface Mount Technology) construction has been used extensively to ensure that the comprehensive functionality of the card can be supported in a single PCB and also to

ensure high reliability in the field.

Considerable flexibility in setting up options for different manufacturers' equipment is included via system settings.

The hardware provides five individual output channels for the forecourt. One is dedicated to IFSF LON, three can be configured for traditional forecourt protocols and one is available for other forecourt devices such as tank gauges or price signs.

IFSF Support

The design of **The Enabler** provides a dedicated channel supporting the International Forecourt Standards Forum specifications. The LON channel includes the special Neuron microprocessor and Echelon LONWorks software necessary to communicate with LON based devices and the IFSF protocols.



Software level integration

The Enabler 2 comes with a Windows NT™ driver and COM Server service and ActiveX based DCOM clients. This greatly simplifies the integration into a host system. This approach is compatible with future Active Store based POS and site systems.

The driver also provides vendor's applications with complete state information in real time on all forecourt activity and errors that may occur in forecourt equipment.

The Enabler data model ensures referential integrity and data validity. Data such as fuel deliveries etc is entered into the databases in real time. Licensed MSDE (Microsoft Database Engine) software is included with every Enabler.

The seamless integration of **The Enabler 2** allows program developers and automation vendors real time, high speed access to the forecourt without the complexities of external interface boxes.

International protocol support

The Enabler 2 is designed to provide hardware and software support for a number of international forecourt interfaces as well as supporting initiatives by third party developers in specialised equipment fields such as security,

environmental and energy control.

The product will support a wide range of international forecourt protocols, which include:

- IFSF Dispenser
- IFSF Tank Gauge
- IFSF Price Sign
- Tokheim International
- Gilbarco US
- Gilbarco Australia
- Dresser Wayne US
- Tatsuno
- Email Australia
- NZ Protocol
- Daruma
- Aspro
- Veeder Root tank gauge
- Other protocols planned

Software design

The software has been designed for the Microsoft Windows NT™ operating system and provides ODBC Database and ActiveX level integration for system developers. The software is fully internationalised and locale "aware" as well as supporting language translation without source code changes – one version of software for all sites.

Supporting options

There is a range of optional hardware and included software for The Enabler - this includes type specific Forecourt Distribution Modules and software modules for wetstock management, Manager activity, reporting and other functions.

Standardised tools

Enabler development has been based on Microsoft MSDE or SQL Server™ and Microsoft development tools throughout. Software has been developed in Visual Basic and C++ as well as Neuron C for the IFSF LON components. ODBC support provides for relational databases other than SQL Server™ and MSDE

Software Developers Kit

System developers will be able to take advantage of the comprehensive Developers CD-ROM that is available from Integration Technologies.

Integration

Technologies Limited

Integration Technologies Limited was formed in 1997. Its aim is to provide innovative components for international system integrators.

Protocol and manufacturer support listed is representative. As variations in protocols exist, not all pump types from any one manufacturer will necessarily be supported or tested.



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"Tools for Systems Integrators"