

Company Profile and Building Blocks

Daffue Electronic Solutions - DES was established in 2006 and in the past years grown ourselves in partnerships with other market leaders and is proud to be able to supply a comprehensive Building Block based system for the Competitive Worldwide market.

In this partnership we constantly striving for service excellence, product reliability and cutting edge innovation. With this mindset we secured projects as the preferred solutions provider for a range of small enterprises to large corporates.

By using our Building Blocks and Software no control or management project is to big or to small and almost anything could be accomplished.

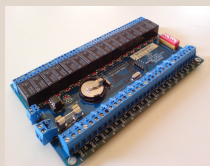
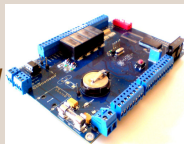
The main interface used to control and supervise the system from our unique Client Specific Software package is the USB-INT.

The **USB-INT** is essentially a secure and robust RS485 interface with a build-in Weigand Reader Interface port and some inputs and outputs.

Additionally the **LAN-INT** provides the capability to interface RS485 and some IO over a 100BaseT Ethernet Port for remote or internet connectivity.

Using these interface Building Blocks the Host PC can configure, Control, Supervise and also collect information from any of the following Building Blocks or even do diagnostics from anywhere.

The **MOD-LOG** Module is a 4Door Access Control, Alarm & Event Controller with Analog measurement features. It could be utilized to expand the systems capabilities or be used on its own.



The **MULTI-IO** Module is a 16 channel IO Module and could be utilized to expand the systems capabilities or be used on its own.

The **MONOLOG** is one of our smaller modules. It is similar to the MOD-LOG with less in and outputs and also less features. It is suitable for smaller applications or on a point where one or two inputs, outputs, measurements or readings are required.



Other Building Blocks are also available for measurement or control.



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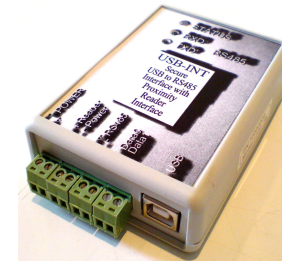
www.daffuees.co.za

Dealer:

AUTONOMOUS BUILDING BLOCKS

USB-INT & LAN-INT

USB to Robust RS485 Interface
with Secure Weigand Reader Interface.
&
LAN to Robust RS485 Interface.



Overview

The USB-INT and LAN-INT are used for a Secure and Robust RS485 Interface between the Host PC and the rest of the Building Blocks.

The USB-INT enables reliable programming and control of the Building Blocks, using a partnership developed PC based client specific software package.

The LAN-INT provide a control and programming interface for Remote sites to be interface with local infrastructure.

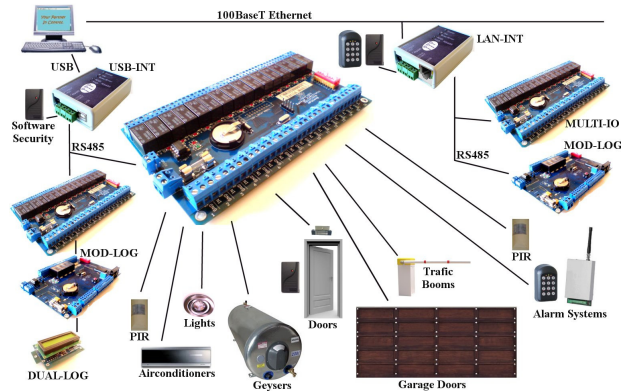
Both the USB and LAN interfaces offers a secure port to authenticate the user working on the PC based software package to prevent unauthorized software access and to log all changes.

Some IO are also provided for custom Inputs or Outputs to the system.

The USB-INT is an essential part of the system and can be installed on any PC with a USB port.

The LAN-INT is a reliable addition to your local system to expand your security and control.

Architecture



Key Features

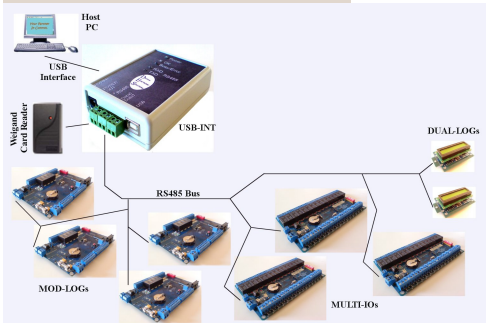
USB-Hardware Features.

- 9 to 18Volt DC Power Supply Input
- USB Version 2.0 Compliant
- Half Duplex RS485 Interface
- Optional RF Link
- 1x 26Bit Weigand Port
- Relay Driver Outputs

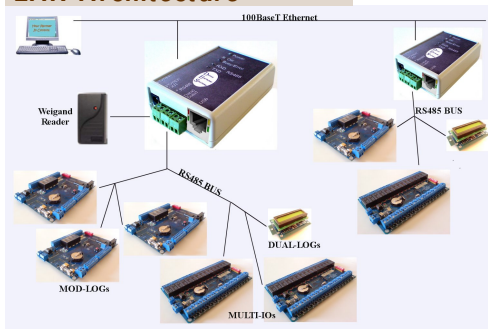
LAN-Hardware Features.

- 9 to 18Volt DC Power Supply Input
- 100BaseT Ethernet Compliant
- Half Duplex RS485 Interface
- Optional RF Link
- 1x 26Bit Weigand Port
- Relay Driver Outputs

USB Architecture



LAN Architecture



Detailed Description:

The USB and LAN INT are both custom designed in South Africa for South African conditions to perform a high level of Access security, Building and Property Management and Control with high data integrity.

The Interface is known as the connection between the Building Blocks for the programming, interrogation and control of the complete system.

Building Blocks are used to expand and strengthen the system to create a custom system architecture to fulfill the needs and requirements of any customer.

A Complete system consists of the following Building Blocks:

- ☐ **The Host PC** with Client Specific Software Package.
- ☐ **The Interface Module** or Modules.
- ☐ **Access, Event or Alarm Module** or Modules.
- ☐ **Alarm Controller Module**

■ **The Host PC** using an Partnership Developed Software Package are in control or supervisory roll of the complete system. Every Software version are Specifically Customized for the individual client to suit the unique requirement of each and every customer.

■ **The Interface Module** is the unit handling the interface between the PC and the Building Blocks, and if required also securing the access to the Host Software Package. This module could be in the form of an USB interface or a LAN interface.

This role is performed by the USB-INT and LAN-INT.

- The USB-INT can be connected to the USB port of any PC with our software package to be used to communicate with the Building Blocks.
- A Secure Authentication Reader could be connected to the USB-INT to authenticate and protect the software from unauthorized changes.
- The robust RS485 Interface are designed to work in electrically noisy environments and can drive a few modules at long distances.
- The LAN-INT can be connected to any existing or newly installed 10BaseT or 100BaseT Ethernet Port for the control of the system in remote locations in local building or over the internet for remote buildings or off-site management of a building or property.
- The USB or LAN interface could be fitted with a Radio Frequency interface, that could be used for a wide variety of purposes from a wireless communication link to handheld remote receiver for access control for motor vehicle or personnel.

■ **The Access, Event or Alarm Module** is the unit that control and log the Access to the clients premises and Events or Alarms happening around the Access points. This unit could be interrogated afterwards or in real-time to extract usable information for a variety of purposes.

■ **The Alarm Controller Module** is the unit that monitors inputs and react to it or control other outputs and store the alarms for history or real-time interrogation.

Technical Specification.

Dimensions and Weight:

- Unit Dimensions (Connectors Included): 100 x 67 x 27mm
- Unit Weight with Cables: 105g

Operating Temperatures:

- Operating Temperature: 0 to +70°C
- Storage Temperature: -10 to +85°C

Power

- 12VDC $\pm 25\%$ @280mA - USB-INT @510mA - LAN-INT

Weigand Device Reader Port

- 1x 16Bit Weigand Access Card Reader Interface Ports

RF Interface (Optional)

- 433MHz Low Power RF Interface

Relay Driver Outputs

- 1x Open Collector Relay driver

Data Interfaces

- RS485 Half Duplex Interface.