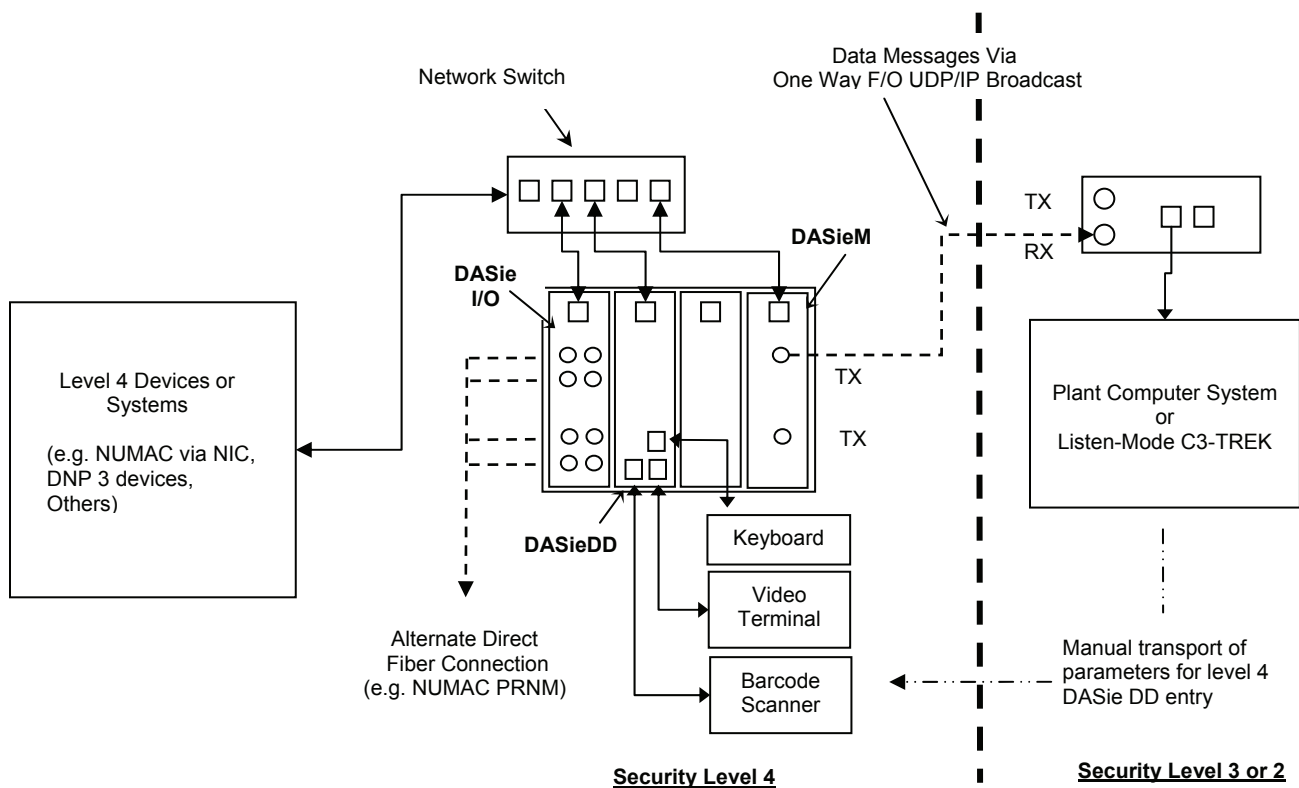




**Need to get data from your level 4 systems to the plant or business level?**

**But still need to interact with your level 4 devices?**

**C3-ilex's Data Acquisition System Importer / Exporter Data Diode (DASie DD) can solve your problem.**

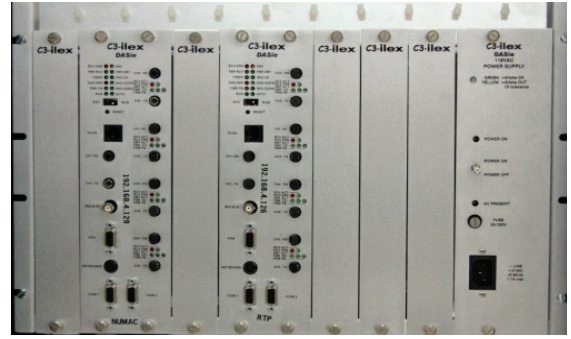


### Features and Benefits

- Designed for NRC Cyber Security requirements which prohibit two-way communications between Level 4 and Level 3 or 2 systems.
- Implemented for NUMAC PRNM via NUMAC Interface Computer (NIC) or direct NUMAC Rod Block Monitor interface via Analogic protocol - Retains the same PRNM service actions and reports as existing PRNM user interfaces, minimizing user training.
- Implemented for DNP 3 devices.
- Adaptable for other applications (e.g. RWM and ATIP)
- Provides a replacement platform for obsolete systems, reduces maintenance costs, improves system reliability.

## DASie I/O

The DASie I/O card provides the direct data interface between security level 4 devices or systems and the DASie Data Diode (DD) card, which performs the data processing and application services. The DASie I/O consists of one or more input/output cards installed in a rack-mountable chassis. Each card has a network port and is capable of handling up to five fiber optic data streams from a variety of devices. The DASie I/O provides the output (i.e., message forwarding) and data retrieval communication paths between the DASie DD and the level 4 devices. The DASie I/O translates the data streams into ones that can be accessed by the DASie DD using TCP/IP protocols.



DASie chassis with two 5 port  
DASie cards

## DASie DD and DASieM

The DASie DD card adds a user interface dimension and one-way data broadcast to the DASie product line to solve the issue of secure communications with Security Level 4 devices. In addition to providing a one-way secure data broadcast between Security Level 4 and Security Level 3 or 2 systems, the DASie DD locally handles a variety of host level functionality and user interface actions for the acquisition and processing of data. The hardware configuration of the DASie DD module is similar in design to the DASie I/O. The DASie Multiplexing (DASieM) card adds the capability to send UDP communications via two independent transmit only fiber optic output ports. The DASie I/O, DASie DD, and DASieM cards reside in a standard DASie 19 inch rack mountable chassis. The DASie cards interface to the network switch located in Level 4. Up to two one-way fiber optic cables connect the DASieM to the Level 2 or 3 network switch. Additional cards may be added to increase the number of input or output channels. The Plant Computer or Listen-Mode C3-TREK is connected to the Level 2 or 3 switch to receive broadcast data from the DASieM via the one-way fiber optic cable. No other communication path between the Plant Computer and the DASie is allowed in this configuration.

## NUMAC PRNM Interface

For the PRNM interface application, the DASie DD host level functions include the following.

- Sample plan interface to the DASie I/O card for processing PRNM data
- PRNM user interface
  - Viewing system logs
  - Viewing and editing DASie I/O and DASie DD administrative configuration options
  - Displaying APRM/LPRM Gain Adjustment Factors (GAFs), APRM Simulated Thermal Power (STPs) and Percent Core Thermal Power (%CTP) values
  - Entering and downloading of LPRM GAFs and %CTP to the PRNM system
  - Requesting various PRNM Data reports.
- Barcode scanner and keyboard entry of gain adjustment factors and keyboard entry of percent core thermal power for download to the PRNM.
- UDP interface to Security Level 2 or 3 computers listening for the unsolicited or solicited PRNM data messages.