

1MM.

3814

Switching Management
System

IBM 3814 PRODUCT DESCRIPTION

The IBM 3814 is an advanced technology, channel-to-INPUT/OUTPUT control unit switch. The design is modular to allow attachment to systems with a wide range of channel and control unit configurations. The basic switch allows connection of each of four switchable interfaces to any of four channel interfaces. Additionally, the 3814 permits Control Unit Two Channel Switch Control.

The 3814 expands the system input/output (I/O) capability and provides for better utilization of I/O devices by pooling groups of control units between channels.

The 3814 features:

- Remote control up to 305 meters (1000 feet) of the I/O switching and Control Unit Two Channel Switching.
- Pre-stored configurations for ease of operation.
- Two different modes of switching.
- A security mechanism to help the user control access to the switches.
- The capability to attach up to four units together via signal loop cables.

The 3814 utilize one or two IBM 3604 Model 6 Keyboard display terminals as control devices. Most operator and CE functions are accomplished by use of these terminals which can be up to 305 meters (1000 feet) apart.

The 3814 switching management system is comprised of a controller, model group A, which can contain one or two 4 x 4 switch matrixes; an optional remote unit, model group B, which can contain one or two 4 x 4 switches and connected to a model group A via signal loop cables and an optional expansion unit, model group C, which can contain one or two switches and physically attaches to a model group A or B. Each model group is available in four models.

Maintainability

The 3814 is maintained by the use of:

- FAP's (Failure Analysis Procedures)
- Internal microdiagnostics.

Serviceability

- Switch node diagnostic checking and error counters.
- Continuous checking of machine status and reporting of any errors detected.
- Functional packaging for fast isolation of switch node failures.
- Loop status indicators.
- Power fault indicators.



3814 Model A with 3604-6

	Control- ler	Remote Unit	Expansion Unit	
Models	A1	B1	C1	contain a 4 x 4 switch
Models	A2	B2	C2	contain a 4 x 8 switch
Models	A3	B3	C3	contain a 8 x 4 switch
Models	A4	B4	C4	contain two independ- ent 4 x 4 switches

The basic 4 x 4 switch matrix (16 switching nodes) can be increased to a maximum of 128 switching nodes (8 x 16 or 16 x 8) by combining the various units. However, only one Model group A is allowed in a 3814 system.

The 3814 controller, Model group A, operates under micro-code control and has built-in monitoring functions that provide an indication if certain error conditions are encountered.

Characteristics

- 200 - 240 VAC 50/60 Hz single-phase, 3 KVA.
- Fan Cooling.
- Raised Floor Installation.

Software

The 3814 does not interface to the channel and does not require any software support.

Technology

- LOGIC-TTL
- RANDOM ACCESS MEMORY, BI-POLAR
- SWITCH LOGIC, BI-POLAR.

Standard Features

- A controller
- A control panel
- An audible alarm.

Model Group A

- A controller
- A control panel
- An audible alarm
- One or two 4 x 4 switch matrixes depending on the model.
- Four CPU Power Sequence Interfaces.
- Sixteen CU Power Sequence Interfaces.

Model Group B

- Remote Attachment
- A control panel
- An audible alarm
- One or two 4 x 4 switch matrixes depending on the model.
- Four CPU Power Sequence Interfaces.
- Sixteen CU Power Sequence Interfaces.

Model Group C

- One or two 4 x 4 switch matrixes depending on the model.
- Four CPU Power Sequence Interfaces.
- Sixteen CU Power Sequence Interfaces.

Optional Features

- Remote two channel Switch Control
- Channel expansion, external
- Channel expansion, internal

Attachment

Attaches to the standard I/O interface of System 370 Model 135 and up, Processor 3031, 3032 and 3033 all Models, 4331 and 4341. It is cabled to the channel as a standard control unit.

IBM World Trade Corporation
DP Customer Engineering
EHQ - Paris, France

Printed in Western Germany

Dept. Form G 7902-730