HPX-1600
USER GUIDE

Chapter 1-1:
Introduction to Haliplex Products

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1. INTRODUCTION

All Haliplex products are designed to assist telecommunications network operators to provide a large number of voice and data services from a confined space and in a highly efficient manner.

There are three product ranges of Haliplex 1600 family nodes available. The HPX-1600-SS, HPX-1600-IA and HPX-1600-EV, which are housed in a single Rack Unit (1RU = 1.75 inches high) rack mount device, with 16 available slots for Interface Modules (IMs). (Refer to Figure 1) These slots are numbered 01-16.

All HPX-1600 nodes allow for a variety of voice and data services via insertable IMs that can be added and removed as required. This allows service providers to optimise their networks by installing only the actual services required when they are required.

The configuration and management of all nodes and IMs is performed in HPXView, a Windows® based Element Managament System GUI application.

An introduction to each product follows. For more details, example applications and operating instructions refer to the specific online help and/or chapters of the Haliplex Installation and Configuration Manual.

2. HALIPLEX PRODUCTS

2.1. HPX-1600-IA

The HPX-1600-IA is a modern channel bank multiplexer solution, provided in a small single Rack Unit device that provides up to 30 or 24 channels of data or voice connectivity for an E1 or T1 trunk circuit connection respectively. Just as easily the HPX-1600-IA can be used to groom up to 32 x fractional E1 and T1 interfaces in the internal 1024 x 1024 x DS0 Digital Access Cross Connect Switch.

Figure 1 - HPX-1600-IA

The use of Interface Modules minimises capital expenditure and simplifies service connectivity.

2.2. HPX-1600-SS

The HPX-1600-SS supports both Path based protection methodologies (SNCP or UPSR) and circuit switched protection methodologies (MSP or Line 1+1).

The HPX-1600-SS integrates SDH/SONET transmission and multiplexing with Optical Multiplexing, Cross Connect and Integrated Access functionality. This saves the user investing in separate traditional access and switching equipment.

The system is standards based and interworks with traditional PDH and SDH/SONET networks allowing customers to evolve their networks with operational simplicity.

Figure 2 - HPX-1600-SS

2.3. HPX-1600-EV

The HPX-1600-EV is a data multiplexer that combines T1 and 10/100 Base T Ethernet transmission across DS-3 trunks, supporting up to 8 10/100 Base T Ethernet IMs and 28 Dual T1 IMs. The HPX-1600-EV can only be connected with another HPX-1600-EV.

2.4. INTERFACE MODULES

The Interface Modules (IMs) come in a number of variants, allowing connection to a variety of voice and data services. Each IM's I/O is presented on its front panel.

Figure 3:– Interface Module

More information on the IMs is available with their individual configuration and operation in chapter 4 of this manual.

2.5. HPXVIEW

HPXView is a Windows® based Graphical User's Interface EMS application that allows a user to manage and configure HPX nodes and Interface Modules via software.

For more information on HPXView, refer to Section 3 of this HPX-1600 manual.