Engage Communication

CHUB

RACK MOUNTABLE CHASSIS FOR ENGAGE MODULES

The **CHUB** is 5U chassis suitable for ETSI or ANSI installations. The Chassis is designed to accommodate from 1 to 15 Networking, Telecommunication or Encryption modules from Engage Communication **IP•Tube**, **IP•Express**, **Black•Bond** and **Black•Door** product lines. The modules available are listed in the "How to Order – CHUB" table below**.** Refer to the module Data Sheet for its specifications.

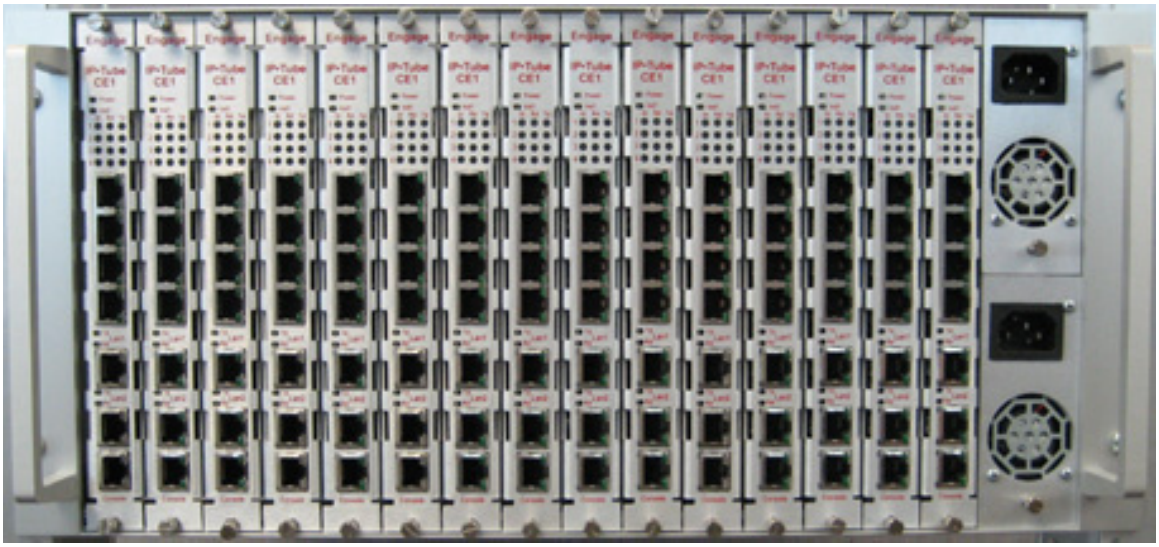
Power

A 5U high 2 inch (50 mm) wide Power slot accommodates 2 Hot Swappable Commercial, Industrial or Military Grade Off The Shelf 1U Chassis Power modules that are available as Universal 90/240 VAC 50/60 Hz, Isolated -48 VDC, or 12 to 30 VDC.

The **CHUB** provides Multi-Site Enterprises, Federal, State and Municipal Government agencies and Service Providers with a Carrier Class rack mountable chassis for central sites.

Management

Each of the Modules is independently managed via its RS232 Console interface or one of its Ethernet LAN interfaces. Each LAN interface features independent IP network configurations. Common management is achieved by collocating a Rack Mountable Ethernet Switch.



Technical Specifications

Regulatory:

- CE
- Safety -IEC60950 • EMC
  - CFR 47 Part 15 Sub Part B:2002, EN55022:1994+A1&A2, EN55024, ICES-003 1997, CISPR 22 Level A

Dimensions:

- Height: 5U (8.75 in, 222 mm)
- Width: 19/23 inches, 480/580 mm
- Depth: 12 inches, 300 mm

Environmental:

- Operating temperature: 0 to 55°C (0 to 131°F)
- Storage temperature: -20 to +70°C (0 to 150°F)
- Humidity: Up to 90%, non-condensing

How to Order – CHUB

Part No.	Description	Notes
095-CHUBE	CHUB CHASSIS	5U High 16 Slot 19/23" Chassis
-ROHS	Restriction of Hazardous Substances	Specify as Suffix for each Module
095-BLANK	Empty Slot Cover	
Power Modules		
095-UNIV-200	Universal Adapter 90/240 50/60 200 Watts	Specify Power Cord - Default USA
095-WIREDC	Power Supply Module 12/26 VDC Screw Term	Requires DB9 Power Cable
095-N48VDC	Power Supply Module Negative 48 Volt DC	Isolated Negative 48 Volt Power
IP•Tube Modules T1 & DS3		
CH-220-1544-02	IP•Tube GT1 2 T1s, 2 LANS	2T1 Base Module
CH-221-1544-02	IP•Tube GT1 2 T1s, 2 LANS, Echo Cancellation	2T1s w/ G.168 Echo Cancellation
CH-222-1544-02	IP•Tube GT1 2 T1s, 2 LANS, Compression	2T1s w/ Lossless Data Compression
CH-223-1544-02	IP•Tube GT1 2 T1s, 2 LANS, Echo Cancellation & Compression	2T1s w/ G.168 Echo Cancellation & Compression
CH-300-1544-04	IP•Tube GT1 4 T1s, 2 LANS	4T1 Base Module
CH-301-1544-04	IP•Tube GT1 4 T1s, 2 LANS, Echo Cancellation	4T1s w/ G.168 Echo Cancellation
CH-302-1544-04	IP•Tube GT1 4 T1s, 2 LANS, Compression	4T1s w/ Lossless Data Compression
CH-303-1544-04	IP•Tube GT1 4 T1s, 2 LANS, Echo Cancellation & Compression	4T1s w/ G.168 Echo Cancellation & Compression
CH-046-4500-01	IP•Tube DS3 1 DS3, 2 LANS	1DS3 Clear Channel DS3 over IP
IP•Tube Modules E1 & E3		
CH-220-2048-02	IP•Tube GE1 2 E1s, 2 LANS	2E1 Base Module
CH-221-2048-02	IP•Tube GE1 2 E1s, 2 LANS, Echo Cancellation	2E1s w/ G.168 Echo Cancellation
CH-222-2048-02	IP•Tube GE1 2 E1s, 2 LANS, Compression	2E1s w/ Lossless Data Compression
CH-223-2048-02	IP•Tube GE1 2 E1s, 2 LANS, Echo Cancellation & Compression	2E1s w/ G.168 Echo Cancellation & Compression
CH-300-2048-04	IP•Tube GE1 4 E1s, 2 LANS	4E1 Base Module
CH-301-2048-04	IP•Tube GT1 4 E1s, 2 LANS, Echo Cancellation	4E1s w/ G.168 Echo Cancellation
CH-302-2048-04	IP•Tube GE1 4 E1s, 2 LANS, Compression	4E1s w/ Lossless Data Compression
CH-303-2048-04	IP•Tube GT1 4 E1s, 2 LANS, Echo Cancellation & Compression	4E1s w/ G.168 Echo Cancellation & Compression
CH-043-4368-01	IP•Tube E3 1 E3, 2 LANS	1E3 Clear Channel E3 over IP
IP•Tube Modules SERIAL		
CH-040-2232-04	IP-Tube RS232 SER, 2 LANS, 4 Sync or Async RS232 DCE/DTE	RS232 Base Module 2.4Kilobit to 256Kilobit
CH-040-0V35-C4	IP-Tube V35 SER - 2 Mbps max, 2 LANS, 4 V.35 DCE	V.35 Base Module 2.4Kilobit to 2.048 Mbit
CH-040-0V35-T4	IP-Tube V35 SER - 2 Mbps max, 2 LANS, 4 V.35 DTE	V.35 Base Module 2.4Kilobit to 2.048 Mbit
CH-04S-2534-04	IP-Tube SER RS530 SER, 2Mbps, 2 LANS, 4 RS530 DCE/DTE	RS530 Base Module 2.4Kilobit to 2.048 Mbit
CH-04S-1534-04	IP-Tube RS530 HS - High Speed SER, 2 LANS, 4 RS530 DCE/DTE	RS530 Base Module 2.4Kilobit to 16 Mbit
IP•Tube Module Options	Contact Engage Sales to validate Option combinations	Specify as suffix to the module ordered
-PRO	Protector Option	Fault Tolerant Network Interconnect
-ALT	Alternator Load Balancing Option	Load Balancing Inverse Mux
-LPT	T1/E1 Link Protector Option	Automatic T1/E1 Circuit Backup with E1OverIP
Encryption Modules		
CH-007-1544-02	BlackBond T1 - AES (256 bit key) E1 Link Encryptor	T1 Circuit Encryption
CH-007-2048-02	BlackBond E1 - AES (256 bit key) E1 Link Encryptor	E1 Circuit Encryption
CH-007-1010-02	BlackDoor Ethernet Encryptor AES Bridge or Tunnel	High Performance Ethernet Packet Encryptor
CH-007-1010-GIG-0x	BlackDoor Server - Gigabit Encryptor AES Bridge or Tunnel	Supports up to 20 remote BlackDoor
IP•Express Modules T1 & E1		**WAN Modules**
CH-077-1544-04	IP-Express CH-GT1, 1 LAN, 4 T1 port	WAN Router or Bridge
CH-077-1544-44	IP-Express CH-GT1-DI, 1 LAN, 1 T1 with 1 T1 Drop & Insert	
CH-077-2048-04	IP-Express CH-GE1, 1 LAN, 4 E1 port	
CH-077-2048-44	IP-Express CH-GE1-DI, 1 LAN, 1 E1 with 1 E1 Drop & Insert	
- IPM	IP-Express MLPPP Inverse Multiplexer Option	Bond multiple T1/E1 circuits

© 2010 Engage Communication • Rev. CHUB • 12.21.2010