Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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CONNECT AND PROTECT

AdvancedTCA

nVent

SCHROFF

Systems – AdvancedTCA

OVERVIEW

MAIN KATALOG

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases . . 3

Climate control . . 4

Electronics cases 5

Subracks/ 19" chassis 6

Front panels, plug-in units 7

Systems 8

Power supply units 9

Backplanes 10

Connectors, front panel component system 11

Appendix 12

12707010

EVERYTHING A SYSTEM NEEDS

Schroff's AdvancedTCA systems make the development of new, forward-looking tele-communications installations with high data-processing rates as simple for you as possible.

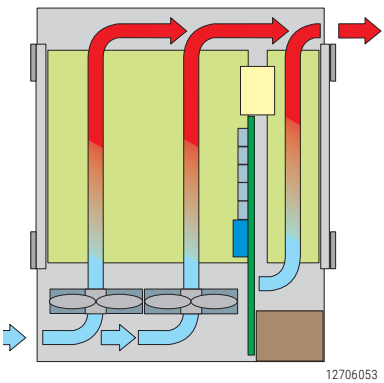
We offer everything on the basis of the AdvancedTCA specification that you have come to expect from a Schroff complete system

Excellent mechanics, optimised cooling, reliable pow8er supply, efficient data distribution and secure system management.

But that is not all:
As a matter of course, our complete systems are also available in shock and vibration-resistant versions with UL certification.

With Schroff, AdvancedTCA means matured products and wide ranges of options:

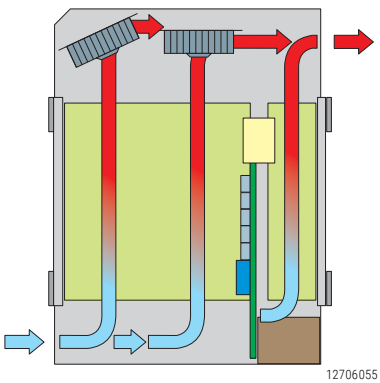
- Dimensions from 2 to 14 U
- 2 to 16 slot installations
- Cooling concepts (push, pull, push-pull)
- Backplane topologies (dual star, full mesh)
- Shelf manager based on Pigeon Point technology



12706053

PUSH COOLING

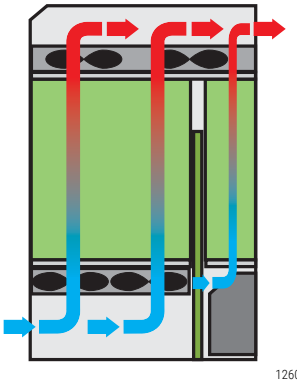
The fans are situated near the air inlet and push the air through the system.



12706055

PULL COOLING

The fans are situated near the air outlet and suck the air through the system.



12606007

PUSH-PULL

The fans are situated below and above the board cage for maximum airflow and optimal redundancy.

Systems – AdvancedTCA

OVERVIEW

Overview 8.2

SYSTEMS AND COMPONENTS AVAILABLE WORLD-WIDE

- **Very wide product range with regard to dimensions, number of slots, cooling designs, backplane topologies and shelf managers; all completely assembled and tested**
- **NEBS ready, UL recognized**
- **For mounting in ETSI, 19" or 23" cabinets**
- **Cooling up to 400 W per board**

PICMG®
Open Modular Computing Specifications

12705006 12705005

ADVANCEDTCA SYSTEMS

- 2 ... 14 U; 2 ... 16 slot
- Backplane with dual star, full mesh topology, 15-fold connected fabric interface with hub/hub or node/node configuration; bussed or radial IPMB
- Push, pull or push-pull cooling
- Shelf manager based on Pigeon Point technology

Systems
5 U, 6 slot 8.5
13 U, 14 slot 8.5
3 U, 2 slot, 84 HP. 8.8
14 U, 14 slot, next generation 8.7
14 U, 14 slot, ECO, 84 HP 8.8

12708006 127070173

ADVANCEDTCA ACCESSORIES

- Front panels and handles
- Shelf manager based on Pigeon Point technology
- Backplane

Accessories 8.9

Field replaceable units (FRUs) 8.18

e.g. individual configuration and assembly
e.g. modifications (integration)
e.g. downloads (CAD drawings, user manuals, test reports)
e.g. custom solutions

ADVANCEDTCA 300/40 SERIES, 6 SLOT, DC

12710001

Front view

12708006

Accessories: optional shelf manager

- 40 G backplane with 6 slots, triple replicated mesh topology; 2 versions:
  - Bussed IPMB
  - Radial IPMB
- 300 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/ -60 V_{DC} input voltage, two redundant power entry modules (PEM)
- Two hot swap fan trays, airflow from right to left (push/pull cooling), air filter exchangeable from front
- 2 shelf managers and 1 SAP (shelf alarm panel) can be installed
- Conforms to AdvancedTCA Standard PICMG 3.0 rev.3.0
- UL recognized, E229721 type T06

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, zinc-plated, 5 U, 84 HP, 464 mm deep, front with overlays, black, RAL 9005, with 6 horizontal slots for 8 U, 6 HP, 280 mm depth AdvancedTCA boards; 6 horizontal slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 6 slot, triple replicated mesh, 2 hub slots, 4 node slots
3	2	Redundant -48 V_{DC}/-60 V_{DC} power entry module (PEM) with circuit breaker
4	2	Hot-swap fan tray with 6 fans each for cooling the boards (> 350 W/ board); Filter mat
5	2	Front panel; Space to accommodate shelf manager
6	1	Front panel; Space for fitting shelf alarm panel (SAP)

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 300/40 series, 6 slot, DC	Triple replicated mesh, 40 Gbps, bussed IPMB	11596-160
	Triple replicated mesh, 40 Gbps, radial IPMB	11596-161
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Front panels and handles		Page 8.10
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Power entry module (PEM) - page 8.18		21990-058
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207
Shelf alarm panel (SAP)		**21596-077**
Fan tray - page 8.19		21990-057
Air filter - page 8.21		21990-059

NOTE

- Modified systems available on request

ADVANCEDTCA 300/40 SERIES, 14 SLOT, DC

12707005

Front view

- 40 G backplane with 14 slots, dual star topology; 2 versions:
- 300 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/ -60 V_{DC} input voltage, two redundant power entry modules (PEM)
- Redundant hot-swap fan trays, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP) and shelf alarm display (SAD)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 700 for bussed IPMB
- Conforms to AdvancedTCA standard PICMG 3.0 rev. 3.0
- UL recognized, E229721 type T07

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, 13 U, 84 HP, 383 mm deep; powder-coated, black, RAL 9005; front 14 slot, 8 U, vertical board mounting, boards 6 HP, 280 mm deep, rear 6 HP, 70 mm deep; cable channel at front and rear
2	1	Backplane, 14 slot
3	2	Redundant power entry module (PEM), -48 V_{DC}/-60 V_{DC}, plugged in at rear, with 4 pairs of lines each per input (8 fuses, 30 A)
4	1	Fan unit at top; 3 redundant fan trays with 400 m^3/h (230 cfm) each, with 2 fans each to cool the front and rear I/O boards; filter mat
5	1	Shelf alarm panel (SAP)
6	1	Shelf alarm display (SAD)
7	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 300/40 series, 14 slot, DC	Dual star, 40 Gbps, bussed IPMB	11990-600
	Dual star, 40 Gbps, bussed IPMB	11990-601
	Full mesh, 25 Gbps, radial IPMB	11990-603
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit		21596-278
Front panels and handles		Page 8.10
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Chassis Data Module - page 8.23		21596-023
Power entry module (PEM) - page 8.19		21596-020
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207
Shelf alarm panel (SAP) - page 8.22		21596-140
Shelf alarm display (SAD) - page 8.23		21596-026
Fan tray - page 8.20		21990-184
Air filter - page 8.21		21596-138

NOTE

- Modified systems available on request

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

ADVANCEDTCA 450/40 SERIES, 2 SLOT, DC, COOLING FROM FRONT TO REAR

12715001

Front view

12715002

Rear view

12715003

Power connection

- Conforms to AdvancedTCA Standard PICMG 3.0 rev. 3.0
- 40 G backplane with 2 slots, 15x connected fabric interface
- 450 W cooling capacity per slot at an ambient temperature of 55°C
- Input voltage -48 V_{DC}/-60 V_{DC}, two redundant power connections with fuse and switch
- Two hot-swap fan modules on rear of case, airflow from front to rear; air filter replaceable from front
- Prepared for one shelf alarm panel and two Schroff shelf managers with Pigeon Point ShMM 700 for bussed or radial IPMB
- FRU file to support the shelf manager with Pigeon Point ShMM 700 are available for download
- UL recognized, E229721 type T15

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, 3 U, 84 HP, 464 mm deep, powder coated, black, RAL 9005; with 2 horizontal slots at front for 8 U, 6 HP, 280 mm deep boards and 2 horizontal slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 2 slots
3	2	Redundant power connection, -48 V DC/-60 V DC, at the rear, with 1 pair of power terminals (1 fuse, 30 A) each
4	2	Redundant fan unit, rear, with 2x2 fans each
5	1	Air filter replaceable from front
6	2	Mounting bracket, for installation in 19" cabinets

ORDER INFORMATION

Cooling capacity	Airflow	Transmission rate	Voltage	Number of slots	Height U	Description	Part no.
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with node/node configuration, bussed IPMB	**11990-800**
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with hub/hub configuration, bussed IPMB	11990-801
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with node/node configuration, radial IPMB	11990-802
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with hub/hub configuration, radial IPMB	11990-803
Accessories							
Shelf manager, ACB-V, bussed 1 piece							**21596-300**
Shelf manager ACB-V, radial 1 piece							**21596-301**
Shelf manager, ACB-VI, bussed 1 piece							**21990-404**
Shelf manager ACB-VI, radial 1 piece							**21990-405**
Shelf alarm panel 1 piece							**21596-077**
Front panels and handles							**Seite 8.10**
AdvancedMC carriers							**Seite 8.26**
Replacement parts (FRUs)							
Fan tray - page 8.20							21990-526
Air filter - page 8.21							21990-527

NOTE

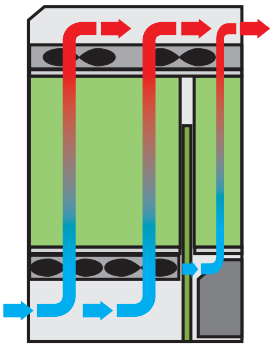
- Modified systems available on request

ADVANCEDTCA 450/40 SERIES CHASSIS, 14 SLOT, DC

12711001

Front view

12708006



12712050

Accessories: optional shelf manager Push-pull cooling

PICMG®
Open Modular Computing Specifications

- 40 G backplane with 14 slots, dual star topology, 2 versions: bussed and radial IPMB
- 450 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/-60 V_{DC} input voltage, two redundant power entry modules (PEM)
- 2 redundant hot-swap fan trays in push-pull configuration, airflow from bottom front to top rear; air filter exchangeable from front
- Prepared for 2 x Schroff shelf managers with Pigeon Point ShMM 700 for bussed or radial IPMB topology
- Conforms to AdvancedTCA standard PICMG 3.0 Rev.3.0
- UL recognized, E229721 type T08

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" plug-in units, St, 14 U, 84 HP, 383 mm deep, powder coated, black, RAL 9005; with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep AdvancedTCA boards; 14 vertical slots at rear, 8 U, 6 HP, 70 mm deep; cable channel on front and rear
2	1	Backplane, 14 slots
3	2	Redundant power entry module (PEM) -40 ... -72 V_{DC}, inserted at rear, with 2 pairs of lines per input
4	1	Fan tray at top with 6 fans, each 565 m^3/h (336 cfm)
5	1	Fan tray at bottom with 6 fans, each 565 m^3/h (336 cfm)
6	1	Telco alarm panel integrated in the bottom fan drawer
7	1	Air filter, can be changed from the front
8	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 450/40 series chassis, 14 slot, DC	Dual star, 40 Gbps, bussed IPMB	**11990-100**
	Dual star, 40 Gbps, radial IPMB	11990-101
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Front panels and handles		**Page 8.10**
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Chassis Data Module - page 8.23		21990-226
Power entry module (PEM) - page 8.19		21990-224
Fuse 30 A/80 V for power entry module, PU 10 pieces		21990-225
Fan tray - page 8.21		21990-227 21990-228
Air filter - page 8.21		21990-229

NOTE

- Modified systems available on request

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

ADVANCEDTCA ECO MODULAR SYSTEM, 14 SLOTS, DC

12715004

12708006

Accessories: optional shelf manager

PICMG®
Open Modular Computing Specifications

- Thanks to their reduced hot-swap features in the fan module, PEM, and CDM areas, Schroff ECO modular systems are optimized for cost-sensitive applications
- A sophisticated modular concept opens up the option of obtaining the ECO modular system in several versions with a range of performance classes
- 14 U, 14-slot system, airflow from bottom front to top rear, 2 slots for Schroff shelf manager ACB-VI
- Support for on-blade shelf management
- A fan module under the board cage featuring an integrated, replaceable air filter, RJ45 sockets for connecting serial interfaces of Schroff shelf managers, plus LEDs for displaying Telco alarms
- Fan control via Schroff shelf managers, on-blade shelf managers, or – in autonomous mode – a temperature sensor in the air inlet area
- Option of additional temperature sensor in air exit area
- Non-hot-swap PEM at the rear, redundant in 450 W/slot version, non-redundant in 250 W/slot version
- Shelf FRU data SEEPROMs directly on the backplane rear, UL recognized, E229721 type T16/T19

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, 14 U, 84 HP, 383 mm deep, powder-coated, black, RAL 9005, with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep boards and 14 slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 14 slots
3a	1	250 W/slot: Non-redundant power connection, -48 V_{DC}/-60 V_{DC}, at the rear, with 1 pair of power terminals (2 fuses, 50 A each)
3b	1	450 W/slot: Redundant power connection, -48 V_{DC}/-60 V_{DC}, at the rear, with 4 pairs of power terminals (8 fuses, 50 A each)
4	1	Fan unit with 8 fans, exchangeable air filter, Telco alarm display, and interfaces for shelf managers
5	2	Mounting bracket, for installation in 19" cabinets

ORDER INFORMATION

Cooling capacity	Power	Airflow	Transmission rate	Voltage	Number of slots	Height U	Backplane type	Part no.
250 W/slot	250 W/slot, non-redundant	from front to rear	40 Gbps	-48/-60 V_{DC}	14	14	Dual star, bussed IPMB	**11990-900**
450 W/slot	450 W/slot, redundant	from front to rear	40 Gbps	-48/-60 V_{DC}	14	14	Dual-dual star, bussed IPMB	**11990-903**
Accessories								
Shelf manager, ACB-VI, bussed 1 piece								**21990-404**

NOTE

- Modified systems available on request

ACCESSORIES OVERVIEW

- Front panel **reinforced** with die-cast end piece and IEA handle **with** spring loading, see from page 8.10
  - Kit
  - Individual configuration
- Front panel and IEA handle **without** spring loading, see from page 8.12
  - Kit
  - Individual configuration (Al or stainless steel) with/without spring loading
- AdvancedTCA front panels with integrated side two cover, see page 8.14
- AdvancedTCA air deflectors, filler panels, see page 8.15
- Shelf managers, see page 8.19
- Backplanes, see page 8.17
- Replacement parts - field replacement units (FRUs), see from page 8.18

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

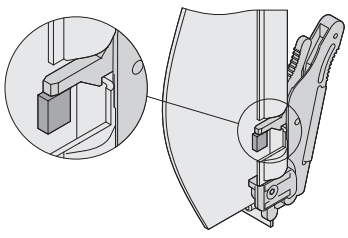
FRONT PANEL REINFORCED WITH DIE-CAST END PIECE AND IEA HANDLE WITH SPRING LOADING

12708004

Delivery excludes board

12707017

AdvancedTCA spring-loaded IEA handle



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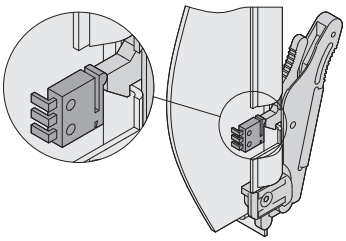
Handle with plunger contact (plunger style)



12707052

Handle with lever contact (lever style)

- Schroff hot-swap handle (when open, the spring loading aids the complete opening of the handle and thus facilitates the insertion of the board)
- Front panel: aluminum or stainless steel, reinforced by the die-cast end piece (increases robustness of front panel)
- Versions for 2 microswitch types (plunger or lever contact)
- EMC textile gasket

DELIVERY COMPRISES (Kit)

Item	Qty	Description
1	1	Front panel
3	2	Die-cast endpiece, alignment pin, knurled screws M3
2	1	Lower IEA handle incl. bearing, spring assisted, (pre-fitted as transport securing device)
4	1	Upper IEA handle incl. bearing, spring-assisted, (pre-fitted as transport securing device)
5	1	EMC gasket, length 299 mm
6	1	Fixing material kit and user manual

ORDER INFORMATION

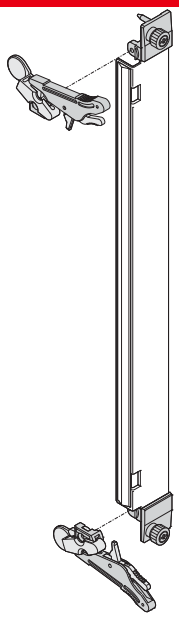
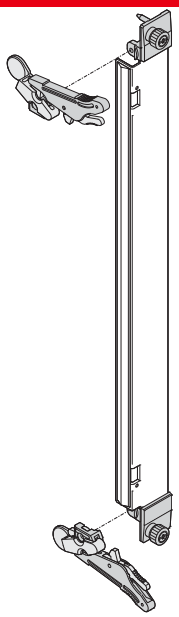
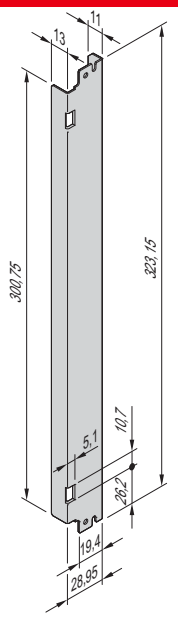
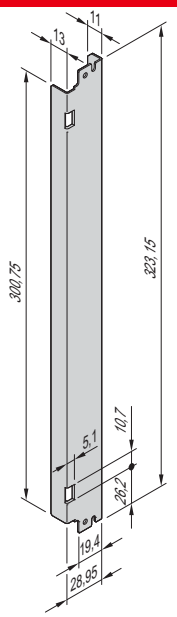
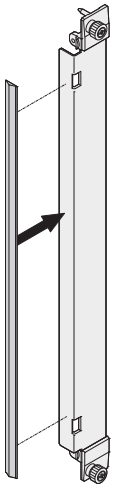
Height U	Width HP	Front panel reinforced with die-cast end piece and IEA handle with spring loading	Part no.
8	6	Stainless steel, with AdvancedTCA IEA handle (plunger type)	**20818-160**
8	6	Stainless steel, with AdvancedTCA IEA handle (lever type)	**20818-161**
8	6	Al extrusion, 1 mm, with AdvancedTCA IEA handle (plunger style)	**20818-169**
8	6	Al extrusion, 1 mm, with AdvancedTCA IEA handle (lever style)	**20818-170**
Accessories			
AdvancedTCA handle (IEA) design element Plastic, transparent, to clip on, for customers' logos, UL 94 V-0, PU 10 pcs			20818-140

NOTE

- Front panels with copper-beryllium gasket (CuBe) available on request
- Front panels with board cover on request
- With its front panel service Schroff offers extensive modification options, including custom cut-outs, foils and screen printing
- Intuitive Ergonomic Aesthetic = IEA handle

CONFIGURATION: FRONT PANEL REINFORCED WITH DIE-CAST END PIECE AND IEA HANDLE WITH SPRING LOADING

ORDER INFORMATION

	Handle with spring loading and die-cast end piece		Front panel		EMC textile gasket	Design element for handle
	Plunger style	Lever style	Stainless steel	Al extrusion		
12708004	 12708051	 12708052	 12708050	 12708050	 12712051	12706024
	2 x handle with spring loading; 2 x die-cast end pieces, PIN, M3 screw; with the IEA handle, when open, the spring loading holds the handle open and thus facilitates insertion of the board		8 U, 6 HP, stainless steel, 1 mm	8 U, 6 HP, Al extrusion, 1 mm	PET triangular gasket, height 2.3 mm, conductive coating CuNi, UL 94 V0, self-adhesive	Plastic, transparent, clips in, UL 94 V-0
	PU 1 kit		1 piece	1 piece	PU 10 pieces	PU 10 pieces
Plunger style	**20818-163**	–	**31596-791**	**31596-899**	21596-376	20818-140
Lever style	–	**20818-164**	**31596-792**	**31596-900**	21596-376	20818-140

NOTE

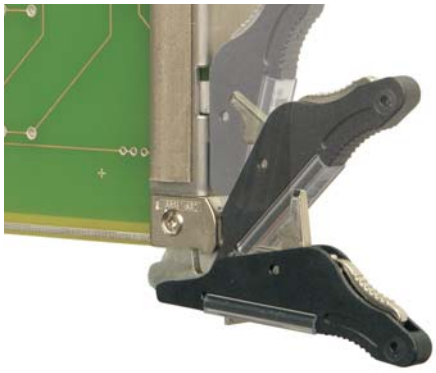
- **I**ntuitive **E**rgonomic **A**esthetic = IEA handle

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

FRONT PANELS AND IEA HANDLE (WITHOUT SPRING LOADING)

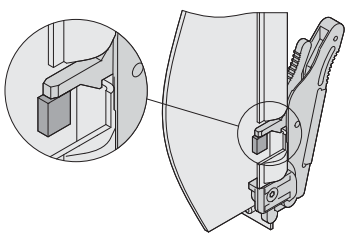
12709002

Left: application example; right: scope of delivery without board



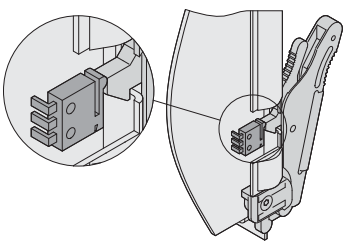
12707017

AdvancedTCA IEA handle



12707051

Handle with plunger contact (plunger style)



12707052

Handle with lever contact (lever style)

- Schroff hot-swap handle (when open, the handle must be held in the open position)
- Stainless steel front panel
- Versions for 2 microswitch types (plunger or lever contact)
- EMC textile gasket

DELIVERY COMPRISES ((kit))

Item	Qty	Description
1	1	Stainless steel or Al extrusion front panel incl. alignment pin and M3 knurled screws
2	1	Lower handle incl. bearing
3	1	Upper handle incl. bearing
4	1	EMC mesh gasket
5	1	Fixing material kit (M2.5 screws incl. thread locking compound)

ORDER INFORMATION

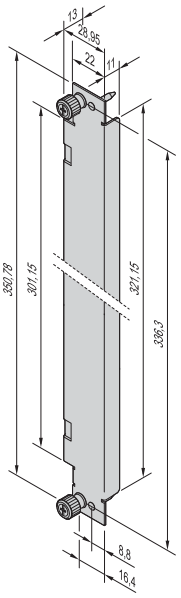
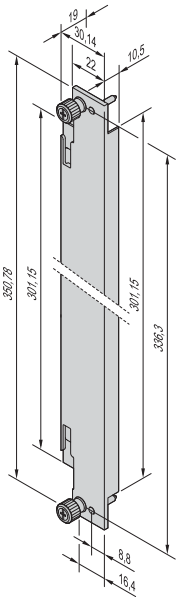
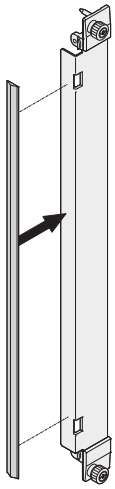
Height U	Width HP	Front panels and IEA handle (without spring loading)	Part no.
8	6	Stainless steel, with AdvancedTCA IEA handle (plunger type)	**21596-324**
8	6	Stainless steel, with AdvancedTCA IEA handle (lever type)	**21596-325**
Accessories			
AdvancedTCA handle (IEA) design element Plastic, transparent, to clip on, for customers' logos, UL 94 V-0, PU 10 pcs			20818-140

NOTE

- Al front panel available through individual configuration service
- Front panels with copper-beryllium gasket (CuBe) available on request
- Front panels with board cover on request
- With its front panel service Schroff offers extensive modification options, including custom cut-outs, foils and screen printing
- Intuitive Ergonomic Aesthetic = IEA handle

FRONT PANELS AND IEA HANDLE (WITH/WITHOUT SPRING LOADING)

ORDER INFORMATION

	IEA handle (with spring loading)	IEA handle (without spring loading)	Front panel		EMC textile gasket	Design element for handle
			Stainless steel	Al extrusion		
12909002	12707017	12707017	 12705059	 12708050	 12712051	12706024
	Pre-fitted handle with microswitch activation; when open, the spring loading of the IEA handle holds the handle open and thus facilitates insertion of the board	Pre-fitted handle with microswitch activation; when open, the handle must be held in open position	Stainless steel, 1 mm, 8 U, 6 HP	Al extrusion, 2.5 mm, 8 U, 6 HP	PET triangular gasket, height 2.3 mm, conductive coating CuNi, UL 94 V-0, self-adhesive	Plastic, transparent, clips in, UL 94 V-0
	PU 10 pieces	PU 10 pieces	1 piece	1 piece	PU 10 pieces	PU 10 pieces
Plunger style, upper	**20818-145**	**20818-121**	**31591-422**	**31596-575**	21596-376	20818-140
Plunger style, lower	**20818-146**	**20818-122**	**31591-422**	**31596-575**	21596-376	20818-140
Lever style, upper	**20818-147**	**20818-123**	**31596-423**	**31596-576**	21596-376	20818-140
Lever style, lower	**20818-148**	**20818-124**	**31596-423**	**31596-576**	21596-376	20818-140

NOTE

- **I**ntuitive **E**rgonomic **A**esthetic = IEA handle

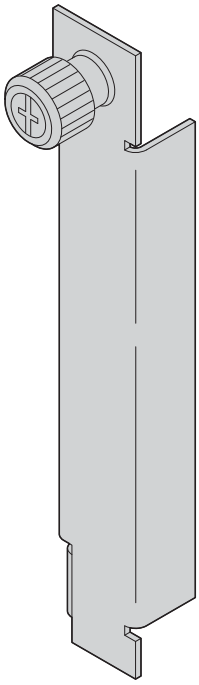
Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

FRONT PANEL WITH INTEGRATED SIDE TWO COVER

12706022

- For protection of components on solder side of backplane
- Customised version available on request
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing

FRONT PANEL TO COVER OPEN SHELF MANAGER SLOTS



12706052

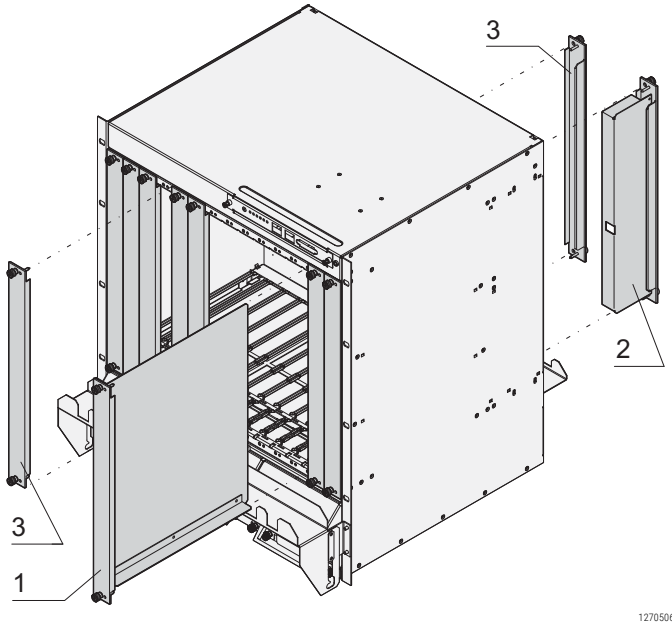
DELIVERY INCLUDES

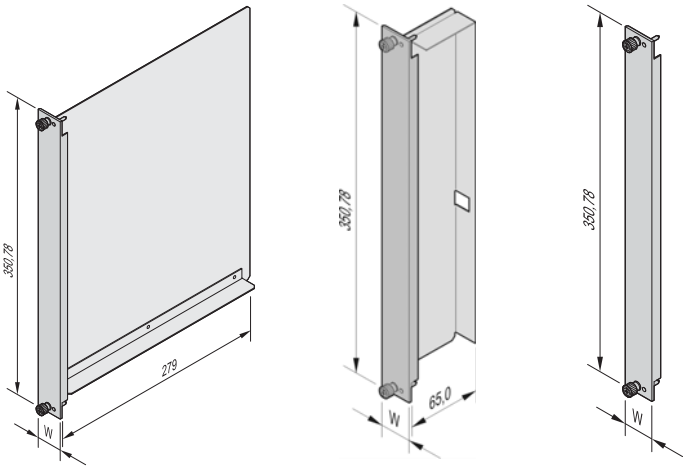
Item	Qty	Description
1	1	Front panel, St, stainless, height 99.32 mm, width 15.22 mm, including EMC sealing
2	1	Knurled screw

ORDER INFORMATION

Description	Qty/PU piece	Part no.
Front panel to cover open shelf manager slots	1	21596-012

ADVANCEDTCA AIR DEFLECTORS, FILLER PANELS





- Front panels, stainless steel or Al extrusion
- 6 HP front panels in three versions
  - Front: Front panel with air baffle (item 1, air baffle blocks the air from unused slots)
  - Rear: Front panel with air baffle (item 2, air baffle blocks the air from unused slots)
  - Only front panel (item 3)

DELIVERY COMPRISES (Kit)

Item	Qty	Description
1	1	Front panel
2	1	Air baffle (front or rear)

ORDER INFORMATION

AdvancedTCA air deflector

Item	Height U	Width HP	Depth mm	W mm	Description	Part no.
1	8	6	280	30.14	Front panel, Al extrusion, incl. air baffle, with mesh gasket	**21596-008**
1	8	6	280	28.95	Front panel, stainless steel, incl. air baffle with mesh gasket	**21591-079**
2	8	6	70	30.14	Front panel, Al extrusion, for rear I/O area, incl. air baffle, with mesh gasket	**21591-107**
2	8	6	70	28.95	Front panel, stainless steel, for rear I/O area, incl. air baffle with mesh gasket	**21591-099**

AdvancedTCA filler panel

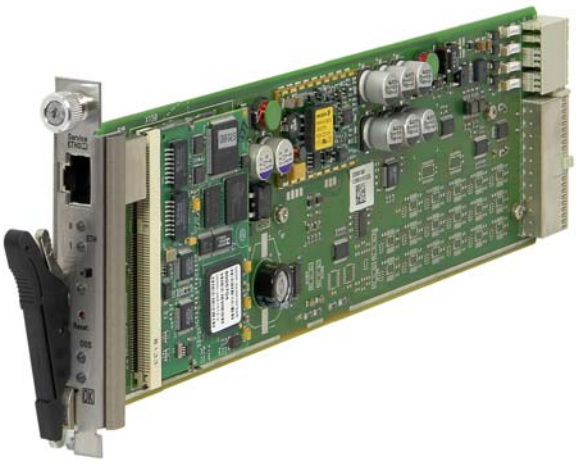
Item	Height U	Width HP	Depth mm	W mm	Description	Part no.
3	8	6	–	30.14	Al extrusion, front panel with mesh gasket	**21591-104**
3	8	6	–	28.95	Front panel, stainless steel, with mesh gasket	**21591-097**

NOTE

- Version with CuBe gasket available on request
- AdvancedMC carriers see page 8.26

Part number in bold face type: ready for shipping within 2 working days
Part number in normal type: ready for shipping within 10 working days

SHELF MANAGER, ACB-V/VI, BUSSED/RADIAL



12708006

12706021

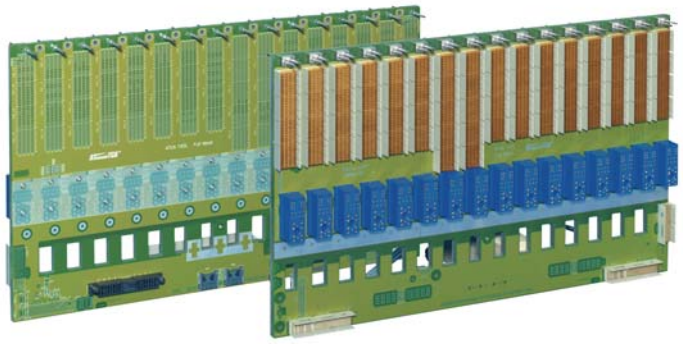
Cable for the serial console of the shelf manager via the SAP

- Shelf manager for Schroff AdvancedTCA systems
- Based on Pigeon Point shelf management technology ShMM 500 (ACB-V) and ShMM 700 (ACB-VI) respectively
- Versions for bussed or radial IPMB
- Ethernet service interface on the front panel
- Serial console for the shelf manager is available via SAP
- ACB-V and ACB-VI shelf managers are plug compatible but require different shelf FRU files
- Shelf FRU files and firmware versions are available for download

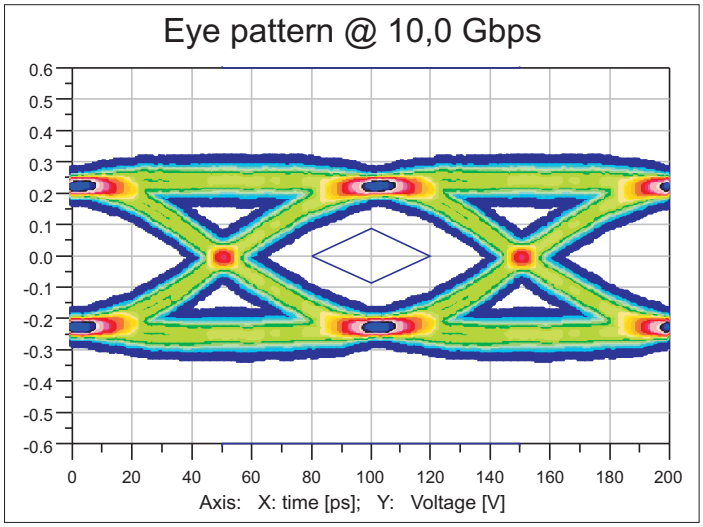
ORDER INFORMATION

Version	ShMM	IPMB	Part no.
ACB-V	500	bussed	**21596-300**
ACB-V	500	radial	**21596-301**
ACB-VI	700	bussed	**21990-404**
ACB-VI	700	radial	**21990-405**
Accessories			
Cable for the serial console of the shelf manager via the SAP RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece			**23204-187**

BACKPLANE



12606003



12707058

All Schroff AdvancedTCA systems are equipped with a high-performance Schroff backplane. Thanks to our years of experience in high-speed data transfer we have now built 40G backplanes to the XAUI specification into our systems, which are constructed with the low-cost FR 4 material. Additionally, the number of layers has been reduced to less than half of the first backplanes.

- The Schroff AdvancedTCA systems are equipped and available with:
  - Backplane with dual star, full mesh and replicated mesh topology; dual dual star topology on request
  - Bussed or radial intelligent platform management interface (IPMB)
  - Redundant power supply, divided into up to four independent segments
  - Point-to-point connection structure independent of protocol
  - Data transfer rates of up to 40 Gbps
  - I^2C bus for internal monitoring
  - Outstanding eye pattern of up to 10 Gbps per differential pair (40G backplane)

FIELD REPLACEABLE UNITS (FRUS)

Field replaceable unit (FRU) designates system components that can be replaced on site. This reduces system downtime to a minimum. Schroff offers various FRU components for AdvancedTCA systems:

- Power entry modules, see from page 8.18
- Fan trays, see from page 8.19
- Air filters see page 8.21
- Shelf alarm panels, see from page 8.22
- Shelf alarm display, see page 8.23
- Chassis data module, see page 8.23

POWER ENTRY MODULE FOR 5 U, 6 SLOT ADVANCEDTCA SYSTEM

12710002

- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- For 2 pairs of lines each (RTN and -48 V_{DC}/-60 V_{DC}) per input
- Delivers up to 350 W/slot
- Hot-swap push-button and LED display (hot-swap, alarms, etc.)
- 2 circuit breakers and 2 double lugs (power terminals)

ORDER INFORMATION

Description	Qty/PU	Part no.
Power entry module 6-slot system (11596-160, 11596-161)	1	21990-058

NOTE

- AdvancedTCA systems see from page 8.6

POWER ENTRY MODULE FOR 12 U, 14 SLOT ADVANCEDTCA SYSTEM

12706006

- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- For 4 pairs of lines each (RTN and -48 V_{DC}/-60 V_{DC}) per input
- 8 fuses 30 A/80 V each

ORDER INFORMATION

Description	Qty/PU	Part no.
Power entry module for 12 U, 14 slot AdvancedTCA system (11596-300, -303)	1	21596-003
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207

NOTE

- AdvancedTCA systems see page 8.9

POWER ENTRY MODULE FOR 13 U, 14/16 SLOT ADVANCEDTCA SYSTEM

12706006

- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- For 4 pairs of lines each (RTN and -48 V_{DC}/-60 V_{DC}) per input
- 8 fuses 30 A/80 V each

ORDER INFORMATION

Description	Qty/PU	Part no.
Power entry module for 13 U, 14/16 slot AdvancedTCA system (11990-600, -601, -603)	1	21596-020
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207

NOTE

- AdvancedTCA systems see from page 8.9

POWER ENTRY MODULE FOR 14 U, 14-SLOT ADVANCEDTCA SYSTEM

12712003

- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- For 2 pairs of lines each (RTN and -48 V_{DC}/60 V_{DC}) per input
- 8 fuses 50 A/80 V each

ORDER INFORMATION

Description	Qty/PU	Part no.
Power entry module for 14 U, 14-slot AdvancedTCA system (11990-10x)	1	21990-224
Accessories		
Fuse50 A/80 V for power entry module, PU 10 pieces		21990-225

- AdvancedTCA systems see page 8.7

FAN TRAY FOR 5 U, 6 SLOT ADVANCEDTCA SYSTEM

12710003

- Fan tray with 6 axial fans to cool front and rear boards in system
- Cooling capacity up to 350 W per board
- Extractor handle, hot-swap push-button and LED display (hot-swap, alarms, etc.)

ORDER INFORMATION

Description	Qty/PU	Part no.
Fan tray for 5 U, 6-slot system (11596-160, 11596-161)	1	21990-057

NOTE

- AdvancedTCA systems see from page 8.6

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

FAN TRAY FOR 12 U, 14 SLOT ADVANCEDTCA SYSTEM

12706007

- Fan tray with 2 fans (330 m^3/h = 195 cfm each) to cool front and rear boards in system
- Extractor handle and LED display (hot-swap, alarms, etc.)

ORDER INFORMATION

Description	Qty/PU	Part no.
Fan tray 12 U, 14 slot system (11596-3xx)	1	21596-236

NOTE

- AdvancedTCA systems see from page 8.5

FAN TRAY FOR 13 U, 14 SLOT ADVANCEDTCA SYSTEM

12706009

- Fan tray with 3 radial fans (300 m^3/h = 175 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)

ORDER INFORMATION

Description	Qty/PU	Part no.
Fan tray for 14-slot systems (11990-60x)	1	21990-184

- AdvancedTCA systems see page 8.5

FAN TRAY FOR 3 U, 2 SLOT-ADVANCEDTCA SYSTEM

12715005

- Fan tray with 2 * 2 axial fans (108 m^3/h = 64,4 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (Operation and Error)

ORDER INFORMATION

Description	Qty/PU	Part no.
Fan tray for 2-slot systems (11990-800, -801, -802, -803)	1	21990-526

- AdvancedTCA systems see page 8.10

UPPER FAN TRAY FOR 14 U, 14-SLOT ADVANCEDTCA SYSTEM

12712001

- Fan tray with 6 axial fans (570 m^3/h = 336 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front

ORDER INFORMATION

Description	Qty/PU	Part no.
Upper fan tray for 14 U, 14-slot systems (11990-10x)	1	21990-227

- AdvancedTCA systems see page 8.7

LOWER FAN TRAY FOR 14 U, 14-SLOT (11990-10X)

12712002

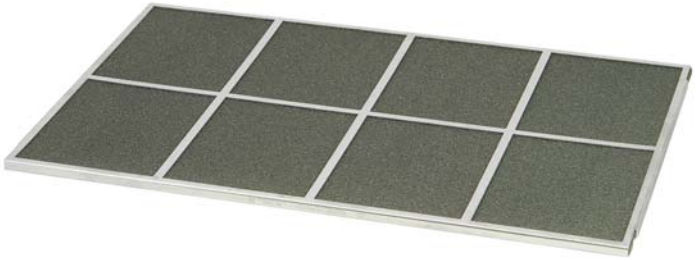
- Fan tray with 6 axial fans (570 m^3/h = 336 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front

ORDER INFORMATION

Description	Qty/PU	Part no.
Lower fan tray for 14 U, 14-slot systems (11990-10x)	1	21990-228

- AdvancedTCA systems see page 8.7

AIR FILTERS FOR ADVANCEDTCA SYSTEMS



12706005

Photo shows air filter of 14 slot system

- 45 PPE, 80 % dust collection to NEBS GR-78 Core standard
- Material Polyurethan UL 94 HF1

ORDER INFORMATION

Air filter	Qty/PU	Part no.
for 3 U, 2 slot systeme (11990-800, -801, -802, -803)	1	21990-527
for 5 U, 6 slot systems (11596-16x)	1	21990-059
for 13 U, 16 slot systems (11592-50x)	1	21594-144
for 14 U, 14 slot system (11990-10x)	1	21990-229

NOTE

- AdvancedTCA systems see from page 8.4

SHELF ALARM PANEL FOR 12 U, 14 SLOT ADVANCEDTCA SYSTEM

12706008

- Displays all alarm signals in accordance with AdvancedTCA specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)
- D-Sub plug for Telco alarm

ORDER INFORMATION

Description	Qty/PU	Part no.
Shelf alarm panel for 12 U, 14 slot systems (11592-40x, 11596-30x)	1	21596-022

- AdvancedTCA systems see page 8.5

SHELF ALARM PANEL FOR 13 U, 14 SLOT ADVANCEDTCA SYSTEM

12707004

- For output of all Telco alarm signals in accordance with AdvancedTCA Specification
- D-Sub socket for Telco alarm

ORDER INFORMATION

Description	Qty/PU	Part no.
Shelf alarm panel for 13 U, 14 slot systems (11596-10x)	1	21596-140

NOTE

- AdvancedTCA systems see page 8.5

SHELF ALARM PANEL FOR 13 U, 16 SLOT ADVANCEDTCA SYSTEM

12706010

- For output of all Telco alarm signals in accordance with AdvancedTCA specification
- D-Sub socket for Telco alarm

ORDER INFORMATION

Description	Qty/PU	Part no.
Shelf alarm panel for 13 U, 16 slot systems (11592-50x)	1	21596-025

NOTE

- AdvancedTCA systems see page 8.9

SHELF ALARM DISPLAY FOR 13 U, 14 AND 16 SLOT ADVANCEDTCA SYSTEM

12706015

- Display the Telco and fan tray alarm signals in accordance with AdvancedTCA Specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)

ORDER INFORMATION

Description	Qty/PU	Part no.
Shelf alarm display for 13 U, 14 and 16 slot systems (11592-5xx, 11596-1xx)	1	21596-026

NOTE

- AdvancedTCA systems see page 8.9

CHASSIS DATA MODULE FOR 12, 13 AND 14 U ADVANCEDTCA SYSTEMS

12706014

Illustration shows chassis data module 21596-023

- SEEPROM for chassis FRU data (user must specifically programm it for the chassis)
- Temperature sensors for input temperature of chassis
- Hall sensor for filter mat ("air filter present")

ORDER INFORMATION

Chassis data module	Qty/PU	Part no.
for systems 11592-50x, 11596-30x, 11596-60x	1	21596-023
for systems 11990-10x	1	21990-226

NOTE

- AdvancedTCA systems see from page 8.9

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Systems – ServicePLUS

APPLICATION EXAMPLES

12908007

- Hybrid system, modification of a MicroTCA single-module board cage into a 3 U chassis to DIN EN 60297

12908005

- MicroTCA system, 1 U for 6 single mid-size AMC modules; power supply, increased air inlet and exhaust area with inwardly curved side panels

12909001

- MicroTCA chassis with hot-swap fan unit and power supply

12309002

- CompactPCI chassis with hot-swap fan unit and custom finishing

12309001

- CompactPCI chassis with 48 V_{DC} power supply

12709003

- 2 slot, 2 U AdvancedTCA chassis with custom colour

Systems – ServicePLUS