

ELMA
Your Solution Partner

19" Chassis and Subracks

PRODUCT OVERVIEW

SYSTEM SOLUTIONS

ENCLOSURES & COMPONENTS

ROTARY SWITCHES



19" CHASSIS AND SUBRACKS

Elma Electronic's family of 19" subracks and chassis products and years of customer experience enable us to deliver solutions tailored to a wide range of applications. Use Elma's expansion kits and accessories with our modular designs to create perfectly integrated, customer-specific configurations. The highly scalable and sturdy 19" subracks, board modules or racks are suitable for use in almost any industry or environment: industrial automation, test and measurement, transportation, energy, defense, communication and medical. The housings comply with common standards such as IEC, IEEE, CompactPCI and AdvancedTCA.

- › IEC 60297 compliant
- › Modular construction
- › Customized solutions on request
- › Large range of accessories

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SLIMKIT 10

The slim 19" EMC chassis with an overall height of 1U or 2U

The 19" 1U high basic subrack offers numerous application possibilities. It can be configured as a completely closed housing with a rear panel, cover plate and mounting tray. Due to its diverse combination of options, the Slimkit 10 can be easily configured to customer-specific requirements while offering excellent EMC properties.



Main characteristics

- › Gasketless EMC shielding
- › Fast assembly
- › Easy access to mounted components
- › Front and rear panels can be removed for easy maintenance

Sizes

- › Width: 19" (enclosure width 440.5 mm)
- › Height: 1U (2U optional)
- › Depth: 240 or 360 mm

Configuration

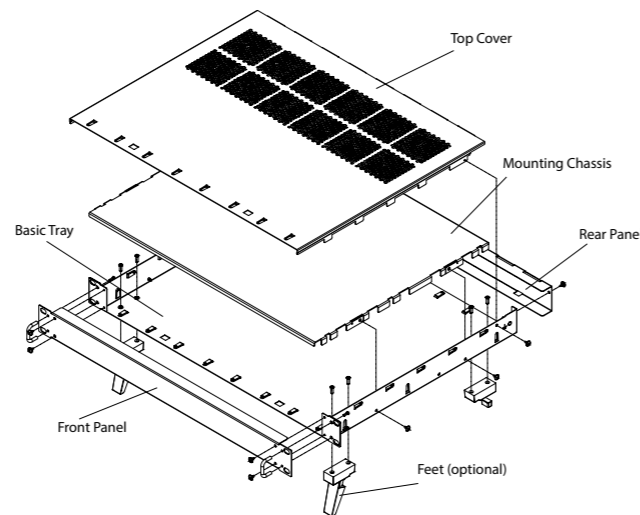
- › Pre-galvanized sheet steel
- › Aluminum front panel

Applications

- › Telecommunications equipment
- › Audio and radio equipment
- › Signal Converters
- › Test and measurement equipment

Product variations

- › Numerous 19" combinations
- › Desktop solutions
- › With or without perforations



SLIMKIT 10 FTTx

The 19" 1U housing specifically designed for secure, fiber optic distribution

The Slimkit 10 FTTx is an ideal cable end distribution in a 19" 1U form factor. The customizable subrack is specifically designed for dividing fiber optic cables. The pull-out drawer allows for easy cable access and maintenance with ample space for the optical fiber cables. Customer-specific variants with different plug connections and labels are available.



Main characteristics

- › Light construction
- › Fits in any 19" chassis or rack system
- › Variable depth through movable 19" angle brackets
- › Provision for splice trays or OFC cable termination
- › Telescopic and tiltable pull-out tray
- › Vast cable storage
- › Options for cable fastening and entry options

Sizes

- › Height: 1U
- › Width: 19"
- › Depth: 220 mm

Configuration

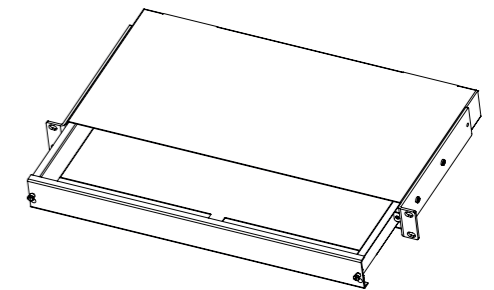
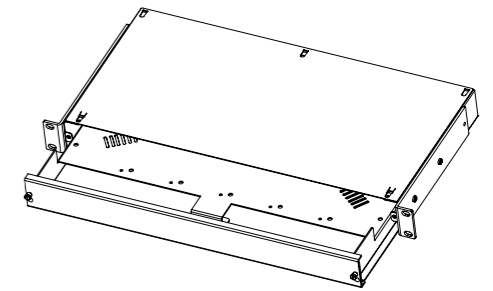
- › Hot-dip galvanized sheet steel enclosure
- › Aluminum front panel
- › Recyclable cardboard packaging

Applications

- › Telecommunications
- › Fiber optic networks

Product variations

- › Fiber optic Slimkit10-FTTx distributor for splice trays
- › Fiber optic Slimkit10-FTTx divider for optic cable terminator



ECOKIT 11

A cost-effective Eurocard solution with diverse configurations

The Ecokit 11 is a simple subrack assembly with aluminum side panels. It is a cost-effective solution for Eurocard systems with depths of 160, 220 or 280 mm. The special shape of the sidewalls securely fasten the front extrusions with minimal screws.



Main characteristics

- › 19" height extrusions with 3 mm overlay (standard only)
- › Suitable for use applications subject to vibration (with cover plates)
- › For systems using Eurocards with depths of 160, 220 or 280 mm

Sizes

- › Height: 3 or 6U
- › Width: 42 or 84 HP
- › Depth: 216 or 336 mm

Configuration

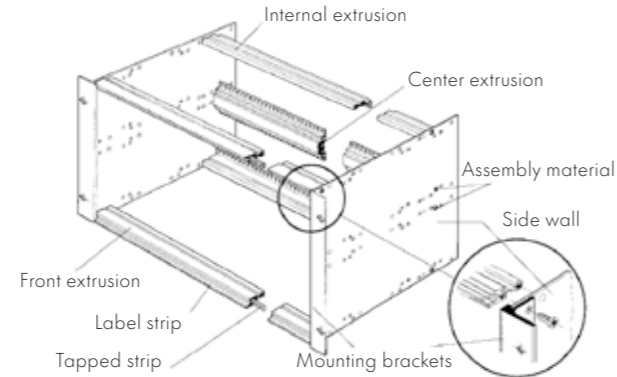
- › Side wall in 2 mm aluminum with integrated 19" mounting bracket
- › Aluminum clear anodized

Applications

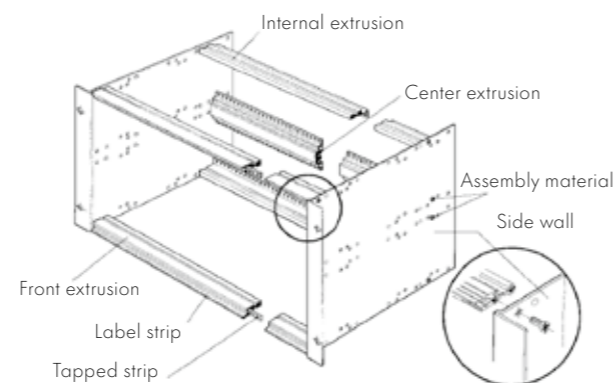
- › Simple electronics assemblies
- › Applications mounted in 19" cabinets

Product variations

- › Standard: 19" mounting brackets with height extrusions
- › Integrated: 19" mounting brackets integrated in side panel
- › ECOKIT 11 Standard



- › ECOKIT 11 Integrated



MAGIC- / SPIRIT-KIT 11

EMC-shielded sheet steel subrack with excellent EMC characteristics

Magic- and Spirit-Kit 11 are EMC shielded subracks for use with IEC or IEEE based boards. Both subracks offer simple and cost-effective construction with excellent EMC protection. Sheet steel side panels ensure an extremely fast assembly and ideal EMC protection without gaskets.



Main characteristics

- › Advanced EMC shielding without gaskets (standard)
- › Internal adapter kits easily accessible
- › Quick assembly
- › Suitable for IEC 60297 (Magic-Kit 11) or IEEE 1101.10 (Spirit-Kit 11)

Sizes

- › Height: 3 or 6U
- › Width: 42 or 84 HP
- › Depth: 240, 300, 390 mm

Configuration

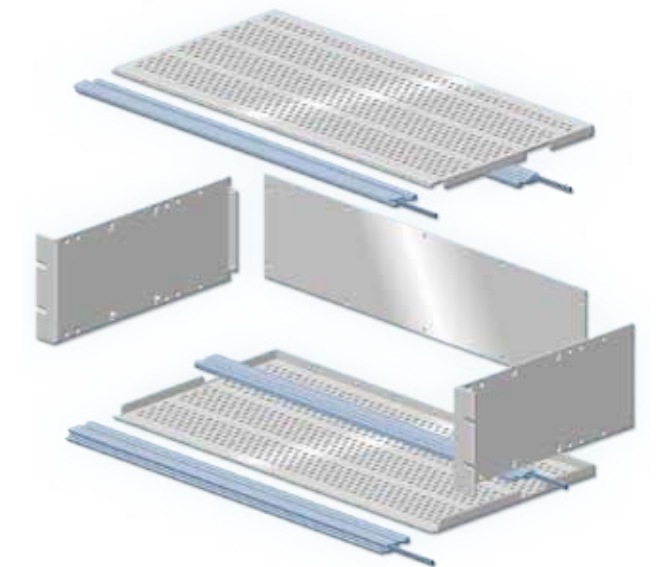
- › Side panels, top cover and ground panel in pre-galvanized sheet steel

Applications

- › Electronics requiring a EMC protection
- › Installations in enclosed cabinet
- › Cost-sensitive projects

Product variations

- › Magic-Kit 11 meets IEC 60297
- › Spirit-Kit 11 meets IEEE 1101.10
- › Numerous accessories
- › Vertical and horizontal card mounting



SYSTEMKIT 12K

EMC-shielded subrack design with a large variety of accessories

The Systemkit 12K is an all-aluminum high-end subrack system which offers high flexibility and a wide range of functionality. It can be easily tailored to customer requirements.



Main characteristics

- › Configurable for VME, VPX, or CompactPCI applications
- › Accommodates rear I/O mounting
- › EMC protection already included in base version
- › RoHS compliant
- › Different heights and depths available
- › Accessory sets for unique configurations
- › Customizations on request
- › Shock- and vibration resistant according to EN 60068 or EN 50155 (for railway applications)

Sizes

- › Height: 3 to 9U
- › Width: 84 HP
- › Depth: 289 to 500 mm

Configuration

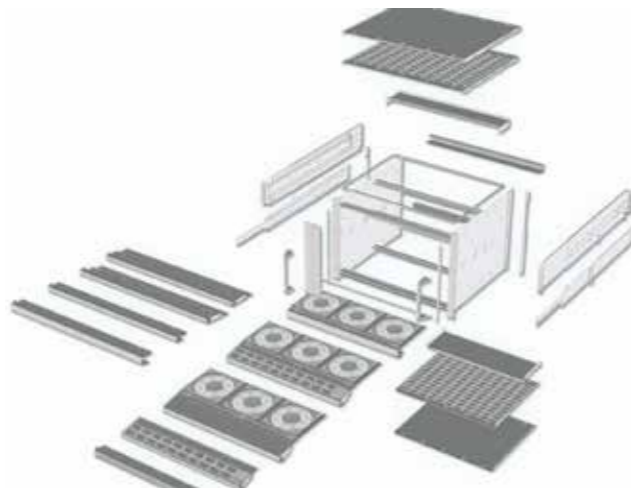
- › Clear passivated aluminum

Applications

- › Rugged applications
- › Defense or vehicle applications
- › Applications with high EMC requirements

Product variations

- › Can accommodate different dimensions for special card depths
- › Combinations of rear I/O and recessed card mounting
- › Horizontal and vertical dividers
- › Enhanced EMC protection with optional gaskets
- › Special equipment on request
- › Various sizes and colors
- › Unique interior design



SYSTEMKIT 12K RAIL

The subrack system for demanding railway applications

Based on the Systemkit 12K, the Systemkit 12K Rail subrack is specially designed and tested for demanding railway applications. It is designed to meet the rigorous technical requirements of EN 50155 and SNCF.



Main characteristics

- › Choose from VME, VME64x or CompactPCI
- › Different heights and depths available
- › Option for rear I/O mounting
- › EMC level: Basic (included in base version)
- › RoHS compliant
- › Custom configurations on request
- › Certified for SNCF use
- › Certified to NF F61-005 and NFF 60-002 / NF F67-012

Sizes

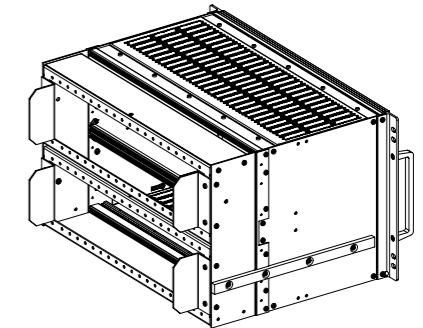
- › Height: 3U and 6U
- › Width: 84 HP
- › Depth: 320 mm for card depth 160 and 220 mm

Applications

- › Installations in railway sector

Product variations

- › Can be configured using Systemkit 12K components
- › Accessory kits for tailored expansion



UNIBOX 14

An universal enclosure that can be used as a subrack or as a desktop case

The Unibox 14 can be used as a subrack or as a desktop enclosure. The extruded aluminum frame functions as well in a subrack configuration as it does as a standalone desktop enclosure (with easy-to-add powder coated covers). With dimensions according to IEC 60297 it offers versatile expansion options. Circuit cards can be installed in the front or rear.



Main characteristics

- › Dimensions according to IEC 60297
- › Subracks as desktop or 19" slide in housing
- › Use as a subrack or enclosure
- › Card installation from the front or rear
- › For installing plug-in modules according to DIN 41494 or IEC 60297
- › Recessed mounting with a pitch of 7.5 mm is possible
- › With cover plates suitable for use in vibration applications

Sizes

- › Width: 42, 63 or 84 HP
- › Height: 2, 3, 4, 6 or 7U
- › Depth: 232.6 to 532.6 mm

Notice: When using telescopic or guide rails, only a width of 81 HP can be used

Configuration

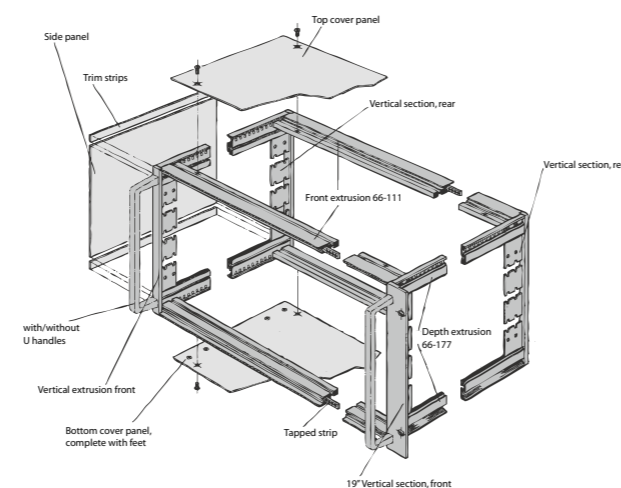
- › Extruded aluminum frame

Applications

- › Laboratory equipment
- › Test and measurement devices
- › PCB slot card configurations

Product variations

- › Use as a subrack or desktop enclosure
- › Cover plates perforated or solid
- › Can be used without cover plates
- › Various configurations



STYLEBOX 15 E-MOTION

Attractive design as EMC shielded desktop or 19" subrack solution

Stylebox 15 e-motion is a portable desktop case designed to 19" standards per IEC 60297 standards. The high-quality design, variety of sizes and variants and wide range of accessories make it ideally suited for a variety of applications such as control systems, measuring devices or general computing systems.



Main characteristics

- › Attractive design
- › Use as a subrack, tower or desktop solution
- › Choice of front panels
- › Option for horizontal and vertical insertion of Eurocard PCBs
- › Internal mounting subrack
- › Dimensions meet IEC 60297 standards
- › Wide range of mounting accessories

Sizes

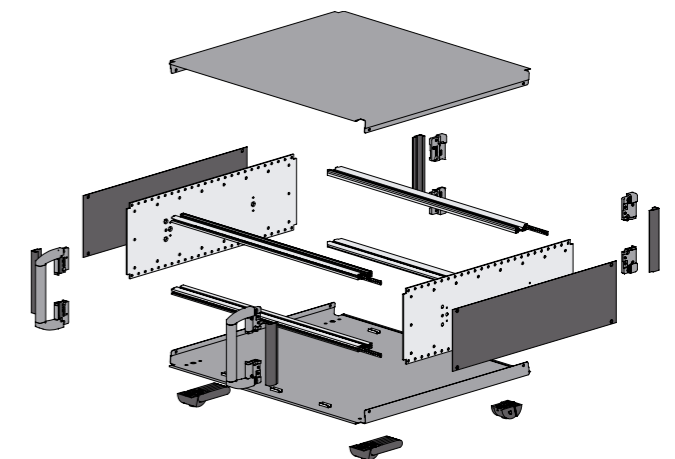
- › Width: 42, 63 or 84 HP
- › Height: 2, 3, 4, 6 or 7U
- › Depth: 245, 305, 395, 500 mm

Configuration

- › Case system: 4 extruded aluminum profiles and 2 sidewalls as a supporting frame
- › Sheet steel covers
- › Clear passivated coating of profiles and steel covers for optimal EMC protection
- › Standard colors: White, silver (other colors on demand)

Product variations

- › Front of the enclosure can be equipped with cover panels, front handles or 19" mounting brackets
- › Optional gaskets for increased, scalable EMC protection
- › Optional folding feet for desktop angled viewing
- › Wide range of sizes available
- › Supports rear I/O
- › Standard or custom front panels
- › Custom configurations available



Applications

- › 19" subrack systems (e.g. for IEC or IEEE circuit cards)
- › Measurement and test instruments
- › Laboratory or field instruments
- › Medical equipment

TECHFRAME 40

Individually configurable cabinet frame system for applications in railway vehicles

The aluminum switch cabinet frame specially developed for rail vehicles has no welding points thanks to uniquely designed corner connections. This enables precise configurations to customer-required dimensions. This guarantees maximum flexibility, even in small quantities.

Main characteristics

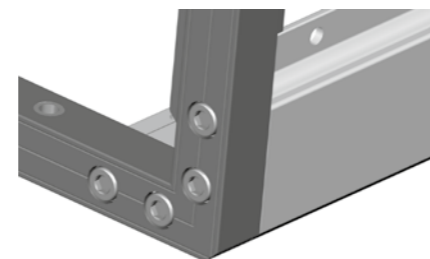
- › Maximum flexibility due to bolted corner connections
- › Perfectly adaptable to the vehicle's individual configuration requirements
- › Vibration, shock and corrosion resistant according to EN 50155
- › Aluminum construction is lightweight and corrosion resistant
- › No welded joints for highest protection

Product variations

- › Dimensions accurate to the millimeter
- › Optional swing frame for flexible equipment installations
- › Interior fittings and components can be installed per customer requirements
- › Optional coatings (anodized or powder coated) available

Applications

- › Traction switchgear in trains
- › 19" racks in mobile monitoring stations
- › Controllers for marine applications



ACCESSORIES FOR 19" MOUNTING

A large range of accessories to complete 19" subracks and chassis

Front panels for subracks and enclosures



- › Flat front panels for 19" subracks and chassis
- › Standard widths from 2 to 84 HP
- › Custom sizes
- › Individual front panel design with our Front Panel Center

Front panels for plug-in modules



- › Extruded or EMC front panels designed to IEC or IEEE
- › Standard widths of 2 to 84 HP and standard height of 3U or 6U
- › Handle cut-outs for IEC, IEEE, AdvancedTCA, VPX handles
- › Individual front panel design with our Front Panel Center

Ejector handles, carrying handles and feet



- › Extraction handles for plug-in assemblies according to IEC, IEEE or AdvancedTCA
- › Optional ESD pin, locking, coding or monitoring contact
- › Card holders for front panels
- › Handles and feet for enclosures

Card guides



- › Card guides designed to IEC or IEEE standards with and without ESD clips
- › 80 to 280 mm in length
- › Plastic and aluminum versions
- › Optional screw-down versions for demanding environments

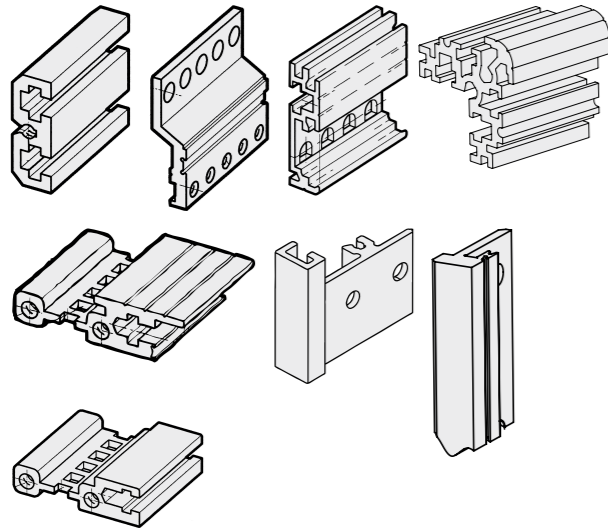
Accessories for 19" mounting

Cassette modules



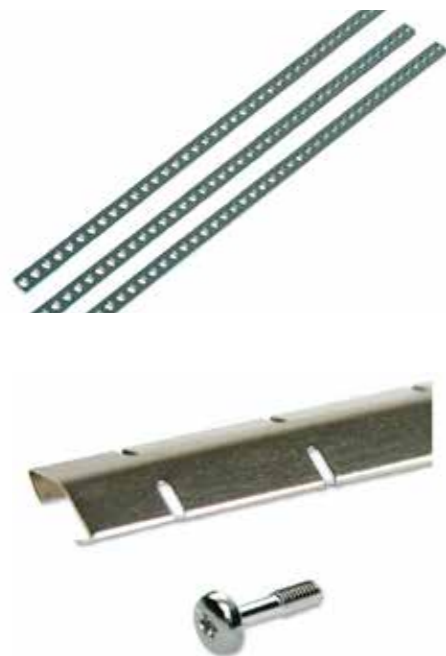
- › Complete cassette modules for plug-in assemblies
- › Single and double Eurocard with depth of 160 mm or 220 mm
- › Ideal for customized EMC protection of the subracks

Extrusions



- › Large selection of extrusions for custom configurations and tailored subrack expansion
- › Designed to meet IEC, IEEE, MicroTCA

Other accessories



All the extras needed to build 19" rackmount systems:

- › EMC gaskets
- › Fastening material
- › Threaded strips
- › Fan modules





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