MAHAN

SYSTEM

Products Guide

2017 - 2018

MAHAN
SYSTEM

Providing international capabilities
in design, manufacturing and
mechanical solution

The world is changing, but our values are not.

We are a fast growing company with the aim of producing high quality server cabinets for the local markets. Now as we are expanding our operation, we are ready to serve international markets specially Middle East and Gulf Region.

Our corporate philosophy focuses on R&D and QC because we truly believe the customers need and requirements change day by day so we have to be agile enough to respond to these needs in a timely manner. We believe that customer is our No.1 priority and we put that in to practice. So we are 100% committed to the quality and meeting our customers' requirements.

INDEX

Company introduction	**6-9**
LION Rack:	**10-15**
LION Server Rack	
LION Wall-mount Rack	
MAHAN Racks	**16-25**
19"Racks Series:	
Material	
Feature	
19″ SERVER CABINET	
FRONT DOOR **REAR DOOR**	
STATIC TEST	
Accessories	**26-31**
OutDoor Racks	**32-40**
OUTDOOR CABINET **OUTDOOR RACKS**	
ATM	**41-43**
Cash dispenser	

INDEX

Kiosk 44-47

INFORMATION KIOSK
Self Service Kiosk
Outdoor kiosk
Catalogue kiosk
Ticket dispenser

Telecommunication Cabinet 48-53

Projects 54-59

IP 42 NETWORK CABINET
ALUMINIUM STRUCTURE CABINET
SUB RACKS
TICKET VENDING MACHINE
GAS DISPENSER
CNG DISPENSER
U P S BOXES
Medical BOXES

Exhibitions 60

Brief Company Overview

Limited Liabilily Company | Registration Number: 444987|

With the vision of becoming one of the leading sheet metal forming manufacturer in Iran, Mahan System was established in 1998. Since then the company has been growing by becoming more and more customer-oriented meeting the ever-changing requirements of its clients. Being able to offer customized solutions to various industrial groups, the company has diversified into various commercial divisions each specializing in specific area.
Being highly price and quality competitive, Mahan System has been able to compete effectively with local and foreign rivals, being able to take a sizable local market share. As part of its expansion plan, «The Global Reach», the company has started its overseas operation by Registering a Georgian Branch in 2017.

Quality Policy

With 15 years of experience, the company is able to provide defect free products and quality services which conform to international standards, and customer specification.
The stringent quality inspection program conducted by highly skilled technical staff assures of the quality presented to the customers in addition to the quality machinery used such as CNC punch and bending, and others.
Quality has never been compromised, and that has been the reason behind the company success, and its fast growing company base.

Our services

Mahan System Co. provides various electronic boxes such as:

- Telecommunication Cabinets
- Indoor and Outdoor Racks
- Wall Mount Enclosure
- Kiosks
- ATM and TVM
- Others including: Battery Cabinet, Medicine Racks, Open Racks, Automobile accessories,…

Operating Divisions:

Engineering & Technical Div. (R&D)

This division is responsible for design and development of new cabinets based on new industry trend and also providing customized solution based on customer exact requirements

Commercial Div.

The commercial division taps on highly qualified sales and marketing staff familiar with domestic and overseas sales and trade transaction. Moreover, the division is responsible for liaising with current customers to find out more about possible issues and recommendations for future improvement, and also seek new markets for future expansion.
The division's core philosophy is that "**Customer is our number "1" Priority"**

Planning & Quality Control Div.

Continuous programs are provided to various divisions based on their specialty and immediate need, ensuring the quality operation of the company as a whole. The manufacturing personnel also go through special machine operation and safety training courses. Bringing the staff up-to-date has allowed the company not only to experience rapid growth but also be able to retain its most valuable asset, meaning its skilled staff.

Personel training

Continuous programs are provided to various divisions based on their specialty and immediate need, ensuring the quality operation of the company as a whole. The manufacturing personnel also go through special machine operation and safety training courses. Bringing the staff up-to-date has allowed the company not only to experience rapid growth but also be able to retain its most valuable asset, meaning its skilled staff.

Production site

The 4000Sq Meter factory located in KhoramDasht Industrial City with 75 people is well equipped with state-of-the-art machineries such as bending, CNC punching, spot welding and others. Moreover, the highly trained and skilled labor force has ensured the optimal quality desired by the industry, in addition to the production efficiency achieved.
The production process is based on stock-to-order and make-to-order to fulfill the immediate and special need of the clients.

Washing section

All of the accessories washed with warm water and mild liquid detergent – followed by a fresh water rinse to maintain the attractive appearance of the powder cured film. Therefore the coated surface is free of oil-grease-dust mill and metal oxides.

Painting site

Optimal painting is attained by using special Convection oven, and electrostatic spraying. Skillful workforces are used in the painting site to achieve the highest quality and required thickness.

Laboratory system

Our experts in the laboratory use the best scientific method for reaching the best possible painting and washing solution by using special high tech painting equipment like convection oven and other needed equipment and facilities.

Assembly Line

All the products are assembled by skillful staff with special care, making sure the final product would be flawless of defects. The products are packed carefully in Bubble Nylon or carton, and put on pallets for transportation to any parts of the world

Laser Machine
LC-2415

Ultra high-speed processing of thin material. Table type to facilitate loading and unloading

Punching Machine
ARIES-225 C.N.C

LION Server Rack

IP20

LION Wall-mount Rack

IP20

LION Server Rack

Material

SPCC cold rolled steel.
Thickness : 1.5 and 2 mm
Color:RAL9004

RAL9004	RAL9002	RAL7035

Feature

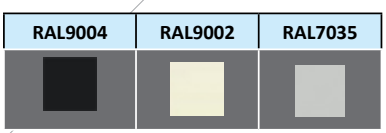
- o High density vented front door and double section vented rear doors
- o Capability of opening the doors from right or left
- o Cable entry on the top and bottom cover
- o Capability of mounting side-by-side with related mounting kit
- o Front door and rear door with 75% perforated
- o Removable side panels for easy maintenance
- o Earthling system between main parts
- o Optional installation of plinth
- o Easy disassembling for shipping and storage cost
- o IP: 20
- o Static loading: 1800Kg
- o Electrostatic powder coating
- o Comply with IEC297-2

Code NO.	Capacity (Unit)	Width (mm)	Depth (mm)	Height (mm)
MSCR42100	42	600	100	2000
MSCR42120	42	600	120	2000
MSCR38100	38	600	100	1822

LION Wall-mount Rack

Material

SPCC cold rolled steel.
Thickness : mounting profile 1.5mm
Others 1.2mm
Color:RAL9004



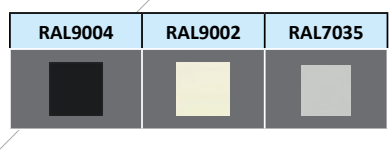
Feature

- o Double section welded frame structure
- o Easy operation and maintaining at the back
- o 19″ standard installation
- o Cable entry at the top cover and bottom panel
- o Capability of fan installation ranges 1 to 2
- o Optional Vented Front Door
- o 4pcs of adjustable mounting profile
- o Electrostatic powder coating
- o Comply with IEC60297-2

Code NO.	Capacity (Unit)	Width (mm)	Depth (mm)	Height (mm)
MSC D903	9	600	600	480

Material

SPCC cold rolled steel.
Thickness : mounting profile 1.5mm
Others 1.2mm
Color:RAL9004



Feature

- o Welded frame structure
- o 19" standard installation
- o Glass front door
- o Capability of fan installation ranges 1 to 2
- o Removable side panels for ease of maintenance
- o Cable entry at the top cover and bottom panel
- o Optional vented front door

Code NO.	Capacity (Unit)	Width (mm)	Depth (mm)	Height (mm)
MSC W701	7	600	450	390
MSC W901	9	600	450	480
MSC W903	9	600	600	480

MAHAN Racks

19''Racks Series

IP20

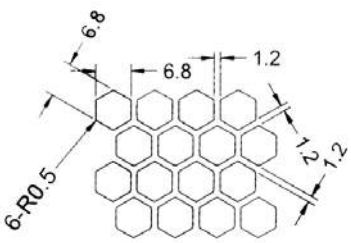
Material

SPCC cold rolled steel.
Thickness : mounting profile 2.0 mm, mounting angle 1.5 mm, others 1.2mm.
Color:RAL9004

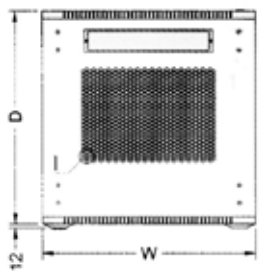
RAL9004	RAL9002	RAL7035

Feature

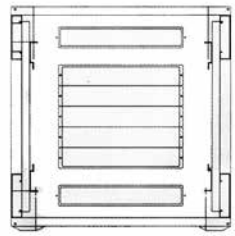
- o Exquisite design with precise dimension and craftsmanship
- o Special durable and secure glass door
- o Optional vented front and rear door
- o Blue Zinc mounting profiles, free of static
- o Adjustable feet and heavy duty castors are both available
- o Cable entry on the top cover and bottom panel with adjustable sizes
- o Optional plinth for fix installation
- o Efficient and reliable assembling and installation with baying kit
- o IP: 20
- o Removable side panels for ease of maintenance
- o Depth: 600mm, 800mm, 1000mm
- o Height: 14U up to 47U
- o Unique hexagonal reticular high-density vented front and rear door enable equipment protection, ventilation and reliable operation
- o High secure locking system against unauthorized access
- o Static loading: 1000Kg
- o Material: 100% steel frame and panels
- o Electrostatic powder coating and zinc plating
- o Various optional accessories
- o Comply with IEC60297-2



Ventilation Rate ٪٧١



Top Cover



Bottom Panel

Code NO.	Capacity (Unit)	Width (mm)	Depth (mm)	Height (mm)
MSI R1403	14	600	600	737
MSI R1405			800	
MSI R1803	18	600	600	915
MSI R1805			800	
MSI R2203	22	600	600	1093
MSI R2205			800	
MSI R2703	27	600	600	1315
MSI R2705			800	
MSI R2706			1000	
MSI R3703	37	600	600	1760
MSI R3705			800	
MSI R3706			1000	
MSI R4006	40	600	1000	1893
MSI R4203	42	600	600	1982
MSI R4205			800	
MSI R4206			1000	
MSI R42806		800	1000	
MSI R4405	44	600	800	2071
MSI R4406			1000	
MSI R4705	47	600	800	2205
MSI R4706			1000	

FRONT DOOR

REAR DOOR

Wall Mount Cabinet

Feature

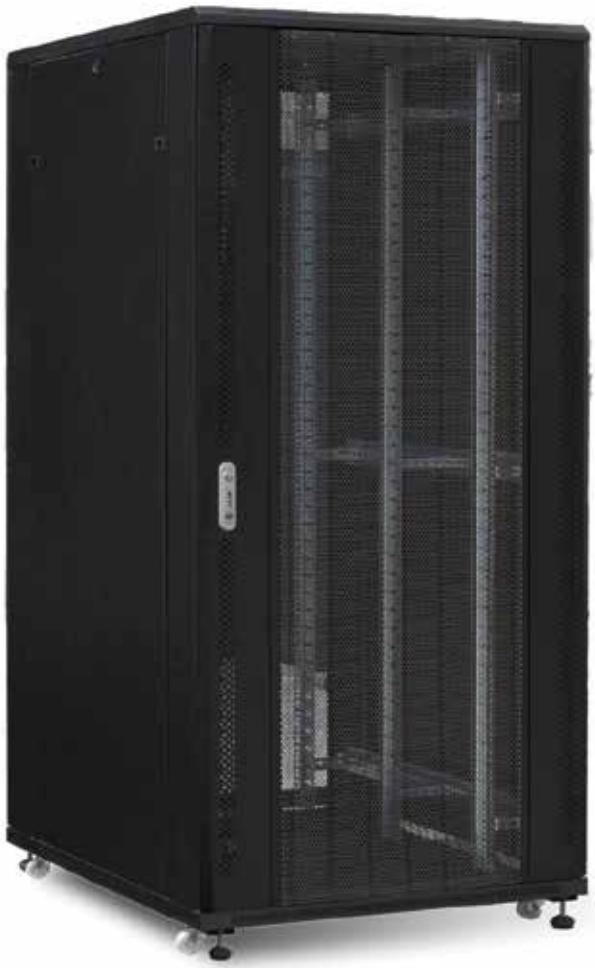
- Capability of fan installing ranges 1 to 2.
- Capability of complete ventilation of the air in the rack.
- Capability of passing cables from the top or the bottom or the sides of the rack.
- Capability of changing the adaptors locations toward the rack depth.
- Capability of opening front door from the left or right side.
- Capability of choosing the front door in from of glass or acrylic.
- Capability of openness and separation of the side doors and complete availability to the rack inner equipments.
- Electrostatic color coverage on all pieces.
- Optional Vented Front Door

Code NO.	Capacity (Unit)	Width (mm)	Depth (mm)	Height (mm)
MSI R701	7	600	450	386
MSI R901	9	600	450	475
MSI R903			600	

RAL9004	RAL9002	RAL7035

Products

Analysis Test

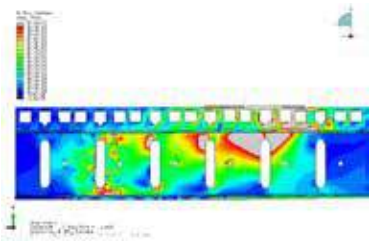


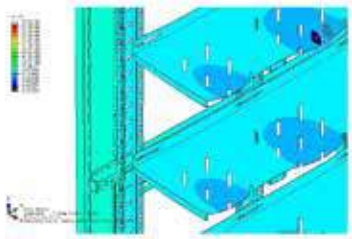
MAHAN RACK

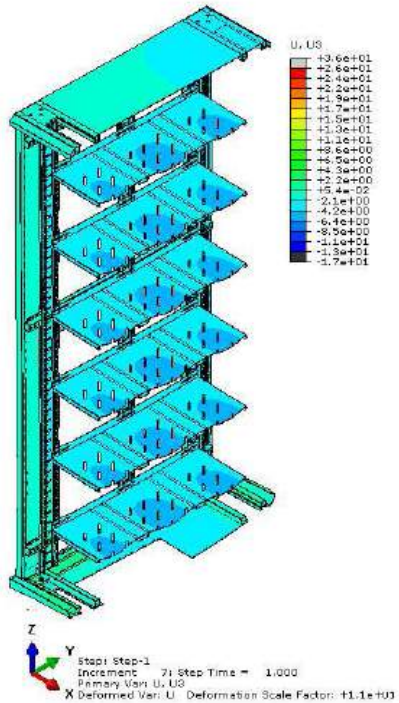
STATIC TEST

- Done with Abaqus software
- Loading 1200kg
- Checking pressure on the plates and profiles

Result: Up to 1200kg can be loaded in Mahan racks without any deformation of the structure



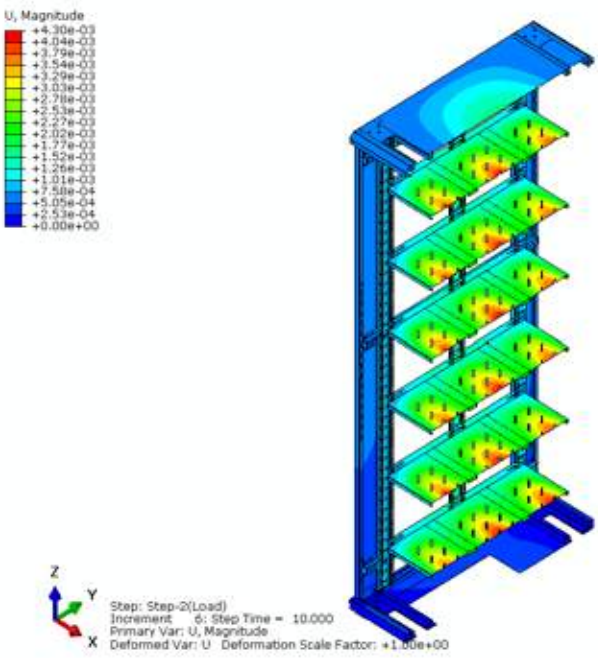


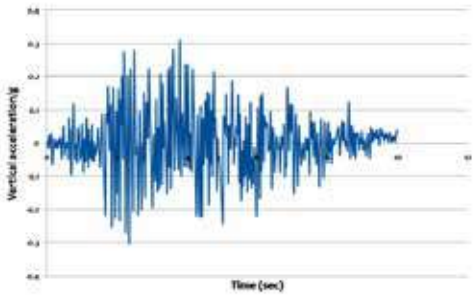


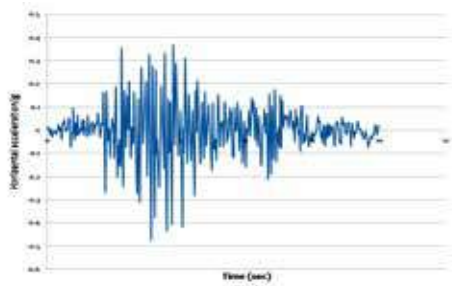
DYNAMIC TEST

- Done with Abaqus software
- Applying horizontal and vertical force
- Check out the rack resistance against vibration with 0.49g horizontal acceleration in 3.35s and 0.31g vertical acceleration in 3.12s

Result: it shows resistance of Mahan racks against earth-quake and max. effect is occurred in 3.35s and its 4.3mm







Accessories

Adjustable Keyboard panel with small round lock

Material

SPCC cold rolled steel t1.2/14"2-section slide

Surface Finish

Degreasing, phosphoric, powder coated.

Parameter

Flexing length:210MM Loading capacity:20KG.

Model NO. TK01

Sliding Shelf

Used for all depths.

Material

SPCC Cold rolled steel

Loading Capacity

20kg

Color

RAL9004

Model NO. TK02

Fixed Shelf

Used for placing equipment

Material

SPCC cold rolled steel t1.2.

Surface Finish

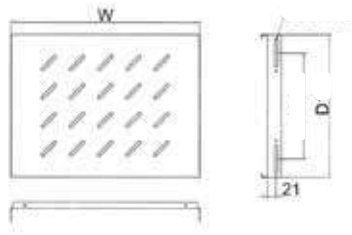
Degreasing, phosphoric, Powder coated.

Loading capacity

60 KG

Color

RAL9004 RAL7035



Model No.	Specification	Dimension (mm)		Use
		W	D	
MSI TF01	60 Fixed shelf	472	350	19" installation for 600-depth cabinets
MSI TF02	80 Fixed shelf	472	550	19" installation for 800-depth cabinets
MSI TF03	96 Fixed shelf	472	731	19" installation for 96/1000-depth cabinets

AC Power

Code NO.	Outlets No.	Installation	Remark
MSI P03	-3ports	Horizontal	Only for wall-mounted
MSI P06	-6ports	Horizontal	-
MSI P07	-7ports	Horizontal	With fuse
MSI P08	-8ports	Horizontal	With On/Off key
MSI P09	-9ports	Horizontal	-
MSI P16	-16ports	Vertical	With fuse

19" TEMPERATURE CONTROLLER

ON/OFF control
Input specification → Basic specification : NTC (Thermistor)
Option: RTD (DIN pt100Ω)
Indication range → NTC Sensor type : -40.0 ~ 99.9˚C (40~212˚F)
RTD Sensor type : -99.9 ~ 99.9˚ (148 ~ 148 F)
Includes various delay function.
Auto/Manual Defrost selection function , start-up delay
Of compressor , Re-operation delay , minimum ON time,
Delay of defrost-end, operation delay of evaporation-fan
Input correction function
It is available to set operation period for protection compressor in error.

Model NO. T01

19" LIGHT PANEL

- Attaches anywhere within the cabinet by the help of an adhesive tape High output
- Low power consumption (10 W)

Model NO. L01

L Rail

Fastened to mounting rails for supporting equipment.

Material

SPCC cold rolled steel t1.5.

Surface Finish

Degreasing, phosphoric, powder coated.

Color

Yellow and White Zinc

Model No.	Specification	Use
MSI LR03	60L rial	600-depth cabinets
MSI LR04	80L rial	800-depth cabinets
MSI LR05	96L rial	960-depth cabinets

Cable Management:

Make your cable looms neat, organized, easy to manage, and easy to troubleshoot with this all-metal 1U cable organizer.
Simply slip cables into the hooks and route them to their destinations.

Blanking Panel

For 19" cabinets

Material

SPCC cold rolled steel t1.2.

Surface Finish

Degreasing, phosphoric, powder coated.

Color

RAL 9004 RAL7035

Model No.	Specification	Height (U)
MSI B01	1U Blanking panel	1U
MSI B02	2U Blanking panel	2U
MSI B03	3U Blanking panel	3U
MSI B04	4U Blanking panel	4U

Adjustable Plinth

Material

SPCC cold rolled steel t.2

Surface Finish

Degreasing, phosphoric, powder coated.

Color

RAL 9004 RAL7035

Fuse Panel (PDU)

For 19" cabinets

Material

SPCC cold rolled steel t1.2.

Surface Finish

Degreasing, phosphoric, powder coated.

Color

RAL 9004 RAL7035

OutDoor Racks

OUTDOOR CABINET

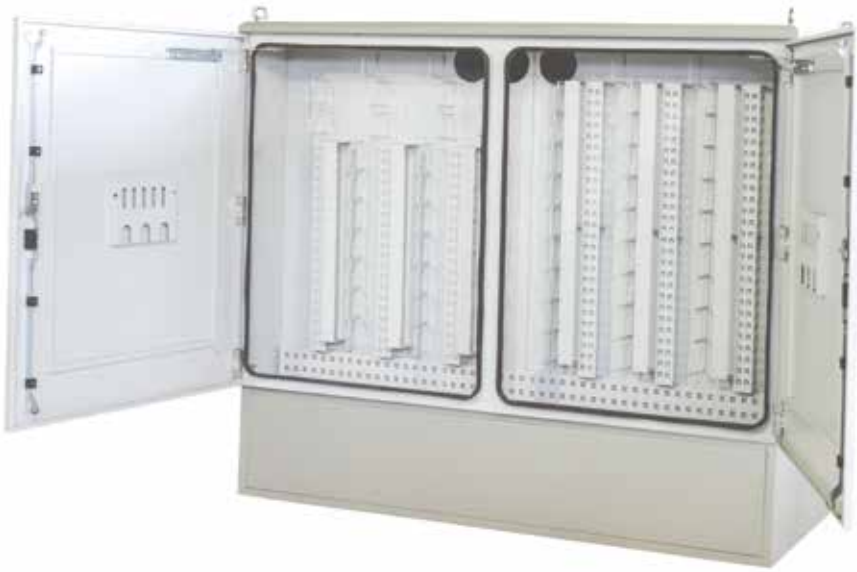
Manufactured according to Customers exact drawing and specifications
Strong resistance to ever-changing weather conditions
Degree of protection: IP54

Material :

- Steel sheet .AL.SS…. is optional
- Front door: thickness 2.0st
- Side panel: thickness 1.5st
- Finish : electrostatic powder coating (RAL 7035) is optional
- Easy to assemble due to efficient design
- Damage free transport
- Fixed on palette
- Hot air exchange by side panel ventilators
- Protection category :
  IP(isolating protection)=54.
  IP standard is according to IEC solutions.

Telecommunication Optical Cabinet

- Easily deploy in rugged outdoor environments with a temperature range from –40°C to 55°C including high humidity
- The sealed cabinets meet IP55 protection ratings, allowing for installation in adverse conditions such as close to salt water and near or in factories
- Thermal design takes different cooling mode such as fan, heat exchanger and air-condition in accordance with different working environment of the cabinet to achieve heat exchange within the cabinet
- Anti-theft design ensure cabinet and equipment's safety



Outdoor Telecommunication Cabinet

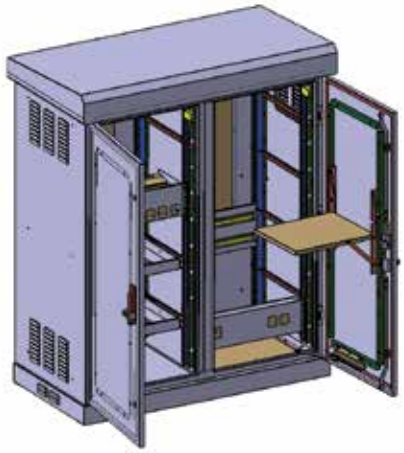
Telecommunication Outdoor Cabinet

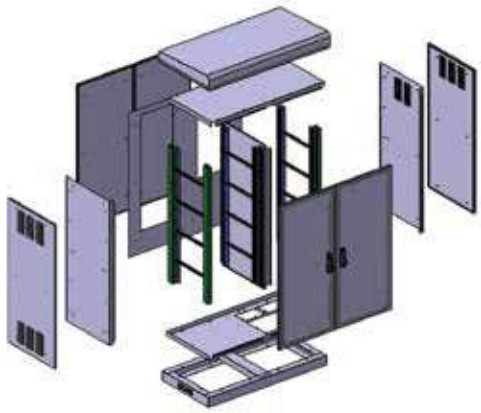
Manufactured according to Customers exact drawing and specifications
Strong resistance to ever-changing weather conditions
Degree of protection: IP54
Manufactured according

OUTDOOR RACKS

OUTDOOR CABINET

Manufactured according to Customers exact drawing and specifications
Strong resistance to ever-changing weather conditions
Degree of protection: IP54





19"OUTDOOR CABINET

Manufactured according to Customers exact drawing and specifications
Degree of protection: IP54

Cooling

Voltage	220 Volts 1 Phase
HZ	50
Amps at Full Load	2 Amps
BTU/Hour	1200 (350 Watts)
Max Ambient Temp	55°C
Weight	24 KG
Dimensions (H×W×D)	400×230×190 mm
Body Color	Static Silver

Cooling

Voltage	220~230 Volts 1Phase
HZ	50
Amps at Full Load	3 Amps
BTU/Hour	6000 (1750 Watts)
Max Ambient Temp	55°C
Weight	55 KG
Dimensions (H×W×D)	740×430×290 mm
Body Color	Static Silver

Voltage	220~230 Volts 1Phase
HZ	50
Amps at Full Load	3 Amps
BTU/Hour	7000 (2000 Watts)
Max Ambient Temp	55°C
Weight	50 KG
Dimensions (H×W×D)	325×700×560 mm
Body Color	Static Silver

Voltage	220~230 Volts 1Phase
HZ	50
Amps at Full Load	6 Amps
BTU/Hour	8000 (2345 Watts)
Max Ambient Temp	55°C
Weight	50 KG
Dimensions (H×W×D)	880×460×250 mm
Body Color	Static Silver

ATM

ATM

Manufactured according to Customers exact drawing and specifications (Pro cash)

Cash dispenser

Its successful design blends harmoniously into any environment where
effective advice, information and presentation are needed.
Modern communications and technology with a new look.
Additional installation of a sound system is possible.
Height: 1655.0mm
Width: 790.0mm
Depth: 740.0mm

Capability of using at the banks ,markets ….
Capability of card reader ,monitor and printer installing.
The bottom mid section is a strongbox and top section is cash dispenser.
Strong box is including of two model door:
Security door with a code lock (thickness15.0) and perforated door with a cylinder lock (thickness 2.0)
And top section is including one round door with a cylinder lock.
Capability of cable entry at rear panel.

Coating

Electrostatic powder coating (RAL 5007)
All of inner accessories are yellow zinc plated.

Material

Front door , side panels and rear panel
are steel sheet (thickness 2.0)
Strongbox is steel sheet (thickness 15.0)

Kiosk

Customized Kiosk

Information Kiosk

Free standing, slim and most important with elegant design, Simple, Easy-going, eyeball attracting makes it's the best choice for overall indoor kiosk applications.

Transaction Kiosk

These Series are free standing Transaction Kiosks. The Kiosk can be used for bill payment, e-payment, e-Ticketing, Order entry, Check-In and information checking of Airport, Banking,Transportation,Travel & Tourism, Finance & Insurance, Library, Canteens, Retail Outlets etc.

Advertising Kiosk

Work perfectly to integrate with a bigger size advertising display. Bigger signage LCD Display offers commerce advertisements and convenience for customer collecting information that will easy attract the eyeball of the end user

INFORMATION KIOSK

Manufactured according to Customers exact drawing and specifications

MSI 081709 MSI 081710

Kiosk are on hand 24-7 to provide up to the minute
information,attract interest ,and receive requests,messages
reservations and orders.
sports ,arts, entertainment,administration,transport,industry
trade and hotel suitable applications are every where!

MSI 081708 MSI 081707

Ticket dispenser

Capability of using in banks and markets …
Variety model and capability cable easy entry at the bottom of structure.
Beautiful structure and easy removed and assembly at different positions.
Capability of door locking.
Dimension:
Length: 1137.3mm
Width: 252.0mm
Electrostatic wrinkle powder coating (RAL 7035).

MSI 081711

MSI 081712

Telecommunication Cabinet

BTS CABINET

- Total height : 1993.75
- Width: 604.5
- Useful Depth: 392.0
- All of the inner accessories in this rack are zinc plated.
- Use different models of subracks in BTS rack including TRX,MRT and BSC .
- Sliding Sub racks are easy removable and fastening by screw bolt.
- heavy duty steel cross bars are bolted with BTS rated bolts at each edge of corner joints enabling cabinet carry even more static loads.
- All of the accessories can be used with a BTS cabinet.This cabinet provide easy access to equipment via the removable roof , sides and front /rear door.
- Triangular lock insert.The handle can only be locked if the door completely closed.
- Rugged galvanize cases
- Steel reinforce cross bars in each side of the cabinet including top and bottom
- Coating :electrostatic powder (RAL 7035)

19" RACK (TELECOMMUNICATION)

- Light and strong frame
- Depth :600mm
- Height: 40U
- Sufficient ventilation ensures that the equipment Would not be over heated
- Highly secure locking system against unauthorized access
- 1500kg static load carrying capacity (with adjustable feet)
- Standard RAL7032 and various color options
- Thickness: Mounting profile 2.0 mm , mounting angle 1.5mm , others 1.2mm
- Material: 100% steel frame and steel panels
- Finish: Electrostatic powder coating and zinc plating

CONTROL PANEL

Manufactured according to Customers exact drawing and specifications (Arian Asansor)
A product of Arian Asansor. First microprocessor control panel manufacture

ETSI Racks (19", 21", 23")

The ETSI (European Telecommunication Standard Institute) define cabinets for telecommunications applications based on the metric norm.

- This rack define for the telecommunication based on the metric norm.
- This rack offered with standard dimensions of
- length :600.0mm, width 600.0mm,height:2141.0mm(44u).
- Cable entry access panels at top and bottom.
- Rear panel and front door are optional.
- Perforated or glazed metal front door .
- Option: welded frame with the stronger structure.
- Easy customized to individual requirements .
- Easy to assemble due to efficient design .

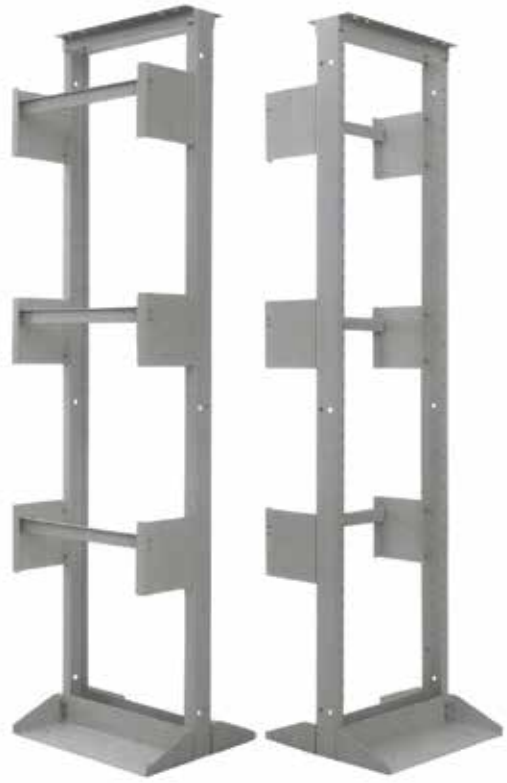
Material:

- Side panel,front column,front door and rear panel supporting thickness are 1.5.
- Roof and bottom section are 2.0 thickness.
- Rear panel fastened by screw bolt.
- Front door lock by triple point lock.
- Zinc plated or electrostatic powder coated .
- All round accessibility.

ETSI Racks (19", 21", 23")

- o 19" universal whole pattern for front and side mounting of equipment
- o Easy cable management through large cut outs in the frame and easy cable conducts by cable clamps mountable on all faces
- o Base openings ready for individual positioning of the frame
- o Base equipped with feet (standard) or castors (optional)
- o Electrostatic powder coating (standard RAL 7032)
- o Material: 2mm steel

Height (Unit)	Single Frame Open Rack	Double Frame Open Rack	Fixed Frame Open Rack
28	MSI-RLYS-28-U	MSI-RLYD-28-U	MSI-RLYF-28-U
42	MSI-RLYS-42-U	MSI-RLYD-42-U	MSI-RLYF-42-U



Projects

TICKET VENDING MACHINE

Manufactured according to Customers exact drawing and specifications (shahr pardaz)

BANK's KIOSKS

Manufactured according to Customers exact drawing and specifications (Shahr Pardaz)

GAS DISPENSER

Manufactured according to
Customers exact drawing and
specifications (Teknotar)

GAS DISPENSER

Manufactured according to
Customers exact drawing and specifications

CNG DISPENSER

Manufactured according to Customers exact drawing and specifications

CNG DISPENSER

Material:
Plastic front panel
Aluminum rear panel.
Coating: electrostatic powder
All inner accessories are zinc plated.

Disply Stand

UPS BOXES

Available in different sizes and model s and customized up on customer request.
Honey comb and perforated side panels for hot air exchange.
All of the material are optional.
Capability of using a beautiful synthetic plastic material instead front panel.
Electrostatic powder coating(RAL 7035).

Medical BOXES

Capability of installing on trolley and ambulance .
Dimensions:
Length : 330.0mm
Width : 135.0mm
Height: 256.0mm
Material : Al.
Electrostatic powder coating(RAL 9016).
Customization production

Exhibitions

Participation in different exhibition for presenting new products and showing of product's quality.
Participated exhibitions such as:

- IRAN ELECOMP AND TELECOM
- DUBAI GITEX EXHIBITION

This year's exhibitions:

- Gitex 2011

- IRAN TELECOM 2011

- IRAN ELECOMP 2011

o IRAN Elecomp 2013

o IRAN Elecomp 2015

o IRAN Telecom 2015

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