





## 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'

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#### **Brief Company Overview**

Private Joint Stock Company | Registration Number: 335696

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.

As part of the Mahan System growth development plan, Mahan System Ilia was register in 2008 with the mission of introducing high quality server & networking cabinets to local IT companies, as this industry has been facing rapid growth during the last few years, and the need for locally manufactured cabinets is felt more than ever.

Being highly price and quality competitive, Mahan System Ilia 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 considering export of its wide array of solutions to the regional countries.



# **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
- o Indoor and Outdoor Racks
- Wall Mount Enclosure
- Kiosks
- o 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



#### 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

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





**Punching Machine** ARIES-225 C.N.C

















#### 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 /

Exquisite design with precise dimension and craftsmanship

Special durable and secure glass door

Optional vented front and rear door

Blue Zinc mounting profiles, free of static

Adjustable feet and heavy duty castors are both available

Cable entry on the top cover and bottom panel with adjustable sizes

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Optional plinth for fix installation

Efficient and reliable assembling and installation with baying kit

Removable side panels for ease of maintenance

Depth: 600mm, 800mm, 1000mm

Height: 12U up to 47U

Unique hexagonal reticular high-density vented front and rear door

enable equipment protection, ventilation and reliable operation

High secure locking system against unauthorized access

Static loading: 800Kg

Material: 100% steel frame and panels

Electrostatic powder coating and zinc plating Various optional accessories

Comply with IEC60297-2





# 19" SERVER CABINET

Code NO.	Capacity (Unit)	Width (mm)	Depth (mm)	Height (mm)
MSI R1205	12	600	800	648
MSI R1405	14	600	800	737
MSI R1805	18	600	800	915
MSI R2003	20	600	600	1004
MSI R2205	22	600	800	1093
MSI R2703			600	
MSI R2705	27	600	800	1315
MSI R2706			1000	
MSI R3705	37		800	1760
MSI R3706	37	600	1000	
MSI R4006	40 —	600		# ### ################################
MSI R40806	40 —	800	1000	1893
MSI R4203		600	600	1982
MSI R4205			800	
MSI R4206	42		1000	
MSI R42806		800	1000	
MSI R4405		15.5%	800	ngssæm
MSI R4406	44	600	1000	2071
MSI R4705			800	
MSI R4706	47	600	1000	2205

# FRONT DOOR





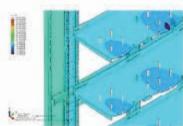


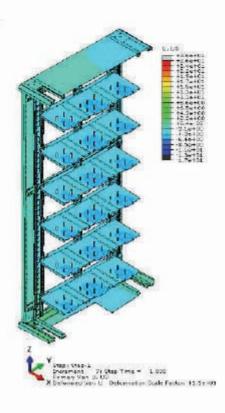
#### STATIC TEST

- · Done with Abagus 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





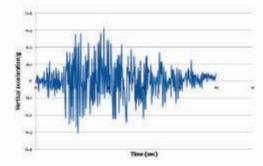


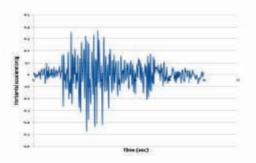
# DYNAMIC TEST

- · 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







#### **Wall Mount Cabinet**



#### Feature

- o 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.

ode NO.	Capacity (Unit)	Width (mm)	Depth (mm)	Height (mm)
MSI R600	6	600	400	310
MSI R701	7	600	450	386
MSI R901		600	450	475
MSI R903	9	600	600	4/3



# Accessories



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# L Rail

Fastened to mounting rails for supporting equipment.

# Material /

SPCC cold rolled steel t1.5.

# Surface Finish /

Degreasing, phosphoric, powder coated.

Color

RAL9004 RAL7035



Specification	Use
3 60L rial	600-depth cabinets
4 80L rial	800-depth cabinets
5 96L rial	960-depth cabinets
	3 60L rial 4 80L rial

# 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



# Fixed Shelf

Used for placing equipment

#### Material /

SPCC cold rolled steel t1.2.

# Surface Finish /

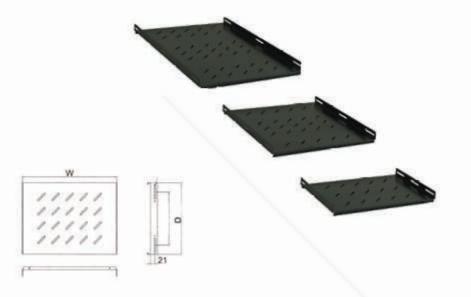
Degreasing, phosphoric, Powder coated.

# Loading capacity /

60 KG

# Color

RAL9004 RAL7035



Model No.	Specification	Dime	nsion (	mm)	Use
			W	D	
MSITFO	1 60 Fixed	shelf	472	350	19" installation for 600-depth cabinets
MSITF0	2 80 Fixed	shelf	472	550	19" installation for 800-depth cabinets
MSITF0	3 96 Fixed	shelf	472	731	19" installation for 96/1000-depth cabinets

# Sliding Shelf Used for all depths.

#### Material

SPCC Cold rolled steel

# **Loading Capacity**

20kg

#### Color RAL9004



#### 19"LIGHT PANEL /

O Attaches anywhere within the cabinet by the help of an adhesive tape High output

Low power consumption (10 W)

Model NO. LO1



#### 19"TEMPERATURE CONTROLLER

ON/OFF control

Input specification --- Basic specification : NTC (Thermistor)

Option: RTD (DIN pt100Ω)

NTC Sensor type: -40.0 ~ 99.9 °C (40~212°F) RTD Sensor type: -99.9 ~ 99.9 ° (148 ~ 148 F) Indication range

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

#### 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.



#### AC Power /

Code NO.	Outlets No.	Installation	Remark
MSI PO3	3-ports	Horizontal	Only for wall-mounted
MSI Pos	5-ports	Horizontal	
MSI Po6	6-ports	Horizontal	N#1
MSI PO7	7-ports	Horizontal	With fuse
MSI Pos	8-ports	Horizontal	With On/Off key
MSI Po9	9-ports	Horizontal	345
MSI P16	16-ports	Vertical	With fuse



# Blanking Panel

For 19" cabinets

#### Material /

SPCC cold rolled steel t1.2.

#### Surface Finish /

Degreasing, phosphoric, powder coated.

#### Color

RAL 9004 RAL 7035



Model No.	Specification	Height (U)
MSI BO	1U Blank	king panel 1U
MSI BO	2U Blank	king panel 2U
MSI BO	3U Blank	king panel 3U
MSI BO	4U Blank	king panel 4U

# OutDoor Racks



# **OUTDOOR CABINET**

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







# Material:

oSteel sheet .AL.SS.... is optional
oFront door: thickness 2.0st
oSide panel: thickness 1.5st
oFinish: electrostatic powder coating (RAL 7035) is optional
oEasy to assemble due to efficient design
oDamage free transport
oFixed on palette
oHot air exchange by side panel ventilators
oProtection category:

•Protection category : IP(isolating protection)=54.

IP standard is according to IEC solutions.

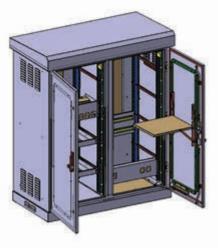


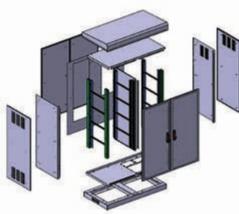


# **OUTDOOR CABINET**

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℃
Weight	55 KG
Dimensions (H×W×D)	740×430×290 mm
Body Color	Static Silver

# Cooling



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



220~230 Volts 1Phase
50
6 Amps
8000 (2345 Watts)
55°C
50 KG
880×460×250 mm
Static Silver







## 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 (thickness 15.0) and perforated door with a cylinder lock (thickness 2.0)

And top section is including one round door with a cylinder lock.



# Coating /

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

# Material

Capability of cable entry at rear panel.

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





# Battery

Cabinets









# Battery cabinet /

- The ability of access to the inside of the case from every four side.
- The ability of opening the doors with rawer lock.
- With strong solidity for keeping heavy battery (s).
- With air-cleaner punches in four sides and floor for air ventilation.
- •With the place for passing the cable.
- oWith four legs.
- ODesigned for keeping different batteries.
- With system of powder color coverage in electrostatic.
- oMaterial: 100% steel frame and steel panels.
- Standard RAL9002 and various color options.
- Finish: Electrostatic powder coating and zinc plating.

loor		Length (mm	)	Width (mm)		Heigh (mm)		
		Inner	Outer	Inner	Outer	Inner	Outer	
	One Floor	510	550	380	430	280	350	
	Two Floor	530	570	380	420	280	720	
	Three Floo	or 530	570	380	420	280	970	
	Four Floor	530	570	380	420	280	1330	

# Battery cabinet /

- The ability of access to the inside of the case from every four side.
- The ability of opening the doors with rawer lock.
- O With strong solidity for keeping heavy battery (s).
  O With air-cleaner punches in four sides and floor for air ventilation.
- o With the place for passing the cable. o With four legs.
- The ability of setting the racks on each other in the one floor ones.
- ODesigned for keeping different batteries.
- o Material: 100% steel frame and steel panels.
- o Standard RAL9002/7035/7031/7016 and various color options.
- o Finish: Electrostatic powder coating and zinc plating.

Floor	Len	gth (mm	)	Width (mm)		Heigh (mm)	
		Inner	Outer	Inner	Outer	Igger	Outer
Four F	loor	885	930	489	538	305	1670
Four F	loor	1201	1250	551	600	305	1670
Five F	loor	885	930	489	538	305	1900





# Kiosk

# INFORMATION KIOSK /

Manufactured according to Customers exact drawing and specifications





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!



## Self Service Kiosk /



Shahrpardaz self service kiosk can be employed to automate many of activities and workflows in governmental and non-governmental sectors.

Many optional type of equipment can be additionally installed in these kiosks for various applications.

Equipments such like:

Barcode scanners to read barcodes on vouchers,
bills, Receipts and etc ...
Hybrid card readers, bill and coin acceptors
for payments.

Various types of printers in different sizes to print
receipts, bills, forms and other documents.

CD/DVD Dispenser to dispense electronic and
multimedia contents.

Card dispensers to dispense tickets, magnet and
smart cards and so on.



## Outdoor kiosk

This Kiosk can be used in open space and has a 55 inch touch screen LCD.

Some advantages of this kiosk are:
It can be used for multimedia advertisement.

Touch screen LCD enables each individual to interact with multimedia application and receive his/her ideal information.

It is portable and can be moved easily.

# Catalogue kiosk /

This Kiosk Has a 32 inch touch screen LCD and has a multimedia software application that enables people to leaf pages and see multimedia contents.



#### 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).



# Telecommunication Cabinet



- OTotal height: 1993.75
- O 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
- OCoating :electrostatic powder (RAL 7035)





#### 19" RACK (TELECOMMUNICATION)

- o Light and strong frame
- O Depth:600mm
  - o 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
    - o Thickness: Mounting profile 2.0 mm, mounting

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.





- OThis rack define for the telecommunication based on the metric norm.
- OThis rack offered with standard dimensions of
- o 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 struc-
- Easy customized to individual requirements . • Easy to assemble due to efficient design .
- O 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.
- OZinc plated or electrostatic powder coated.
- All round accessibility.



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

		Height (Unit)	Single Frame Open Rack	Double Frame Open Rack	Fixed Frame Open Rack	
105	monn.	28	MSI-RLYS-28	-U MSI-RLYD-2	8-U MSI-RLYF-	-28-U
	11	42	MSI-RLYS-42	-U MSI-RLYD-4	2-U MSI-RLYF-	42-U
	1/1					
	107					







# 19" NETWORK CABINET /

Depth: 600mm, 800mm, 1000mm

Height: 22 up to 44U

Mouting depth accommodates servers, 4Ps, storage devices and other network equipment from all major manufactures

Highly secure locking system against unauthorized access

Complete size range

800kg static load carrying capacity (with adjustable feet)

Degree of protection: IP42

Material: 100% steel frame and steel panels

Electrostaic powder coating and zinc plating

RAL9004	RAL9002	RAL7035



#### ALUMINIUM STRUCTURE CABINET

#### Configuration options:

- o Indoor rack.
- o Material: Steel. Aluminum.
- o Width: 600mm, 800mm, 1000mm
- o Depth: 600mm, 800mm, 1000mm
- Height: available of 12U up to 51U.
- O Die cast corner pieces.
- Self guiding and inter locking aluminum frame joints.
- Unlimited number of cabinets, side by side.
- o Capability of fan installing 1 to 4.
- Capability of cable entry at rear and plinth.
   Capability of using two model adaptors with cable entry
- o Capability of tray installing inside and outside of adaptors .
- o 180° hinge.
- O Side panel:
- Single point central lock or double drawer handle

   Wheels and castors with lock or adjustable feet from 25.0mm to 40.0mm.
- System adaptors:
- By using the system adaptor, the principal of two attachment levels outer and inner within this enclosure system is easily achieved.
- o 6-way socket strip with switch:
- The socket strip has a 3m long connection cable, and is conveniently housed in the bottom of work station.
- Electrostatic powder coating (RAL 7035).

RAL9004	RAL9002	RAL7035









## SUB RACKS

We offer an extensive range of products for industrial pcs (19") rack mount versions in 1,2 and 4 unit through to solutions for direct mounting plates.

19" rack mount system for the horizontal installation different kind of devices like storage devices and boards.....



# 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.



#### **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:
OIRAN ELECOMP AND TELECOM
ODUBAI GITEX EXHIBITION

# This year's exhibitions: o Gitex 2011



oIRAN TELECOM 2011





o IRAN ELECOMP 2011





Providing international capabilities in design, manufacturing and mechanical solution



