

PRODUCT PT. TRI JAYA SEMESTA

PT. Tri Jaya Semesta menyediakan berbagai produk untuk memenuhi kebutuhan pasar. Dimulai dari perangkat elektronik kebutuhan industri hingga alat sistem perangkat untuk kesehatan.

UPS (Uninterruptible Power Supply)

Stabilizer

Recitifier & Battery

Charging Products Solar Energy

Generator

CRAC

Electrical Components

X- Ray System for Medical Devices

OUR PRODUCT

UPS (Uninterruptible Power Supply)



Makelsan Level UPS – 800

Makelsan Level UPS – 600

Makelsan Level UPS – 500

Makelsan Level UPS – 450

Makelsan Level UPS – 300

Makelsan Level UPS - 250

OUR PRODUCT



Makelsan 3 Level UPS – 200

Makelsan 3 Level UPS – 160

Makelsan 3 Level UPS – 120

Makelsan 3 Level UPS – 100

Makelsan 3 Level UPS – 80

Makelsan 3 Level UPS - 60

OUR PRODUCT



Makelsan 3 Level UPS - 10

Makelsan 3 Level UPS - 20

Makelsan 3 Level UPS - 30

Makelsan 3 Level UPS - 40

OUR PRODUCT



Makelsan MST-3-3 - 180

Makelsan MST-3-3 - 200

OUR PRODUCT



Makelsan MST-1-1 - 15

Makelsan MST-1-1 – 10

Makelsan MST-1-1 – 30

Makelsan MST-1-1 - 20

Makelsan MST-3-3 - 100

Makelsan MST-3-3 - 120

Makelsan MST-3-3 - 150

Makelsan MST-3-3 - 100

Makelsan MST-3-3 - 22.5

Makelsan MST-3-3 - 75

Makelsan MST-3-3 - 60

OUR PRODUCT



Makelsan MST-3-3 - 1000

Makelsan MST-3-3 - 1250

Makelsan MST-3-3 - 1600

Makelsan MST-3-3 - 2000

Makelsan MST-3-3 - 250

Makelsan MST-3-3 - 800

Makelsan MST-3-3 - 600

Makelsan MST-3-3 - 300

Makelsan MST-3-3 - 500

Makelsan MST-3-3 - 400

Makelsan MST-3-3 - 45

OUR PRODUCT



YOSHIGA MR Series Modular

50-600kVA
PF: 1.0

Advanced Technology

- Online double conversion
- Battery cold start function
- Advanced power module sleep mode
- Dual system control card
- Self-load test function
- Redundant design

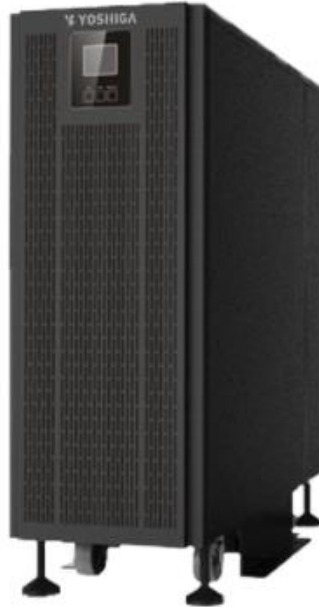
Excellent Flexibility

- Allow 100% three phase unbalance load
- Intelligent battery management
- Parallel expansion up to 8 units
- Fault trace management (FTM)
- Programmable dry contracts

Green Power

- Efficiency up to 96%
- Intelligent fan speed control
- ECO mode and EPO function

OUR PRODUCT



HPT-11T Series (6-10kVA)

Advanced Technology

- Online double conversion
- High input power factor
- EPO for 5kVa
- Galvanic isolation transformer

Excellent Flexibility

- Intelligent RS232 communication port
- UPS management software (Optional)
- SNMP or USB or dry contact (Optional)
- External battery bank (Optional)

High Reliability

- Wide input voltage range
- Full protection function
- High reliability and performance
- Manual bypass switch optional for 5kVA

OUR PRODUCT



HPT-X Series Outdoor UPS (1-10kVA)

UPS tipe online double conversion dengan desain ramah pengguna dan mampu beradaptasi dengan kondisi lingkungan yang keras (Solusi tepat untuk kebutuhan outdoor).

Features and Technologies

- Kapasitas 1-10Kva
- Faktor daya 0.9
- Input voltase 220/230/240 VAC
- Frekuensi 50/60Hz
- Rentang frekuensi input 40-70Hz
- IP55
- Sasis kuat dan solid
- Kontrol mikroprosesor
- Teknik kontrol digital
- Pengatur suhu (Opsional)
- Input daya variatif
- Anti air dan filter anti debu
- *Heat Exchanger* (Optional)
- Insulasi panas dan perlindungan dari sinar matahari

OUR PRODUCT



UPS Yoshiga HPT Plus

UPS Yoshiga HPT Plus dirancang sesuai kebutuhan industri dengan kapabilitas tangguh, minim *maintenance* dan beragam keunggulan lain. Daya yang dihasilkan lebih bersih dan mampu mencegah korsleting.

Features and Technologies

- Kapasitas 10-40Kva
- Faktor daya 0.99
- Voltase input 138-485 VAC (L-L)
- Voltase output ± 192 ($\pm 144+240$) VDC
- Input/Output 3:3/3:1 (30-40kVA)
- Input/Output 3:3/3:1/1:1 (10-20kVA)
- Input THDi <3%
- *Excellent grid adaptability*
- *Strongest resilience capacity*
- *Safe bypass redundancy*
- *Minimize external interference*
- *Cleaner power*
- *Smart fan control*
- Anti lembab, debu, dan korosi
- Baterai eksternal (opsional)
- *Self-dusting function* (opsional)
- SNMP, RS232, dan *parallel port* (opsional)
- Sensor temperatur dan kelembaban (opsional)

OUR PRODUCT



UPS Yoshiga Penta RT Series

Data Center membutuhkan suplai daya cadangan andalan. UPS Penta RT Series dapat menyediakannya berkat dukungan sistem bertipe *online double conversion* dan rentang input variatif. Terdapat dua seri Penta RT Series yang dapat dipilih, yaitu Penta RT-S11 dan Penta RT-S31.

Features and Technologies

- Kapasitas 1-10kVA (Penta RT-S11), 6-10kVA (Penta RT-S31)
- Fasa 1:1 (Penta RT-S11), 3:1 (Penta RT-S31)
- Faktor daya 0.9
- Rentang frekuensi input 45-55Hz/54-66Hz $\pm$ 0.5Hz
- Output transfer secepat 0 ms
- Teknologi PFC untuk menyesuaikan faktor daya
- *Full Digital Control (DSP)*
- Arus input harmonik 3%
- ECO Mode
- *Charging/rectifier/inverter fully digital control technology*
- Optimasi grup baterai dengan kuantitas: 16/18/20 buah (opsional)
- Rentang input daya variatif 120-276 VAC (Penta RT-S11), serta 208-478 atau 120-276 VAC (Penta RT-S31)
- *UPS startup self-testing*
- Proteksi input untuk situasi *over/under-voltage*
- *Automatic bypass*
- *DC start*
- Dilengkapi port RS232 & USB
- *SNMP & Relay card (opsional)*

OUR PRODUCT

STABILIZER



Yoshiga Flash 33 Series is a fully automatic three-phase stabilizer product equipped with a microprocessor and smart driver. The various capacities in this product line can accommodate housing, offices, medical clinics, and industry needs.

Features and Technologies

- Capacity 3-150kVA, 200-3000kVA
- Phase 3:3
- Voltage current 1 Phase 110-240 VAC, 3 Phase 220-440 VAC
- IP20, IP21, and IP54 versions available
- Non-linear load driver
- Extensive voltage and power intervals
- Quick settings
- High efficiency
- Current transfer to bypass via pole change switch
- Economical and safe
- Overload protection (optional)
- Input, output, and status are displayed digitally
- 10 years spare parts support

OUR PRODUCT

YOSHIGA Flash 11 Series



Full Automatic Single Phase
1-50kVA

Features and Technologies

- Non linier load drive
- 1 phase input 1 phase output
- Extensive voltage and power interval
- Quick setting
- Microprocessor
- Supportedant smart drivers
- High efficiency
- Current transfer to bypass via pole charge switch
- Economical and safe
- Overload protection (Optional)
- Input, output and status are displayed digitally
- 10 years spare parts support

OUR PRODUCT



Features and Technologies

- 1 phase- 240 VAC 3 phase 220-440 VAC IP20
- IP21 and IP54 versions available
- Non-linear load drive 3 phase input 3 phase
- Voltage and power interval
- Quick setting
- Microprocessor supported smart drivers
- 1 phase-240 VAC
- 3 phase 220-440 VAC
- IP20, IP21 and IP54 versions available
- Non-linear load driver 3 phase input 3 phase output
- Extensive voltage and power interval
- Quick settings
- Microprocessor supported smart drivers

OUR PRODUCT

RECTIFIER & BATTERY

Thyristor Controlled Battery Charging Rectifier

MAKELSAN® MTT Series
Uninterruptible Power Supplies

3 Phase & 1 Phase

3 Phase		1 Phase	
12 VDC	50-200 A	12/24 VDC	10-300 A
24 VDC	30-300 A	36/48 VDC	10-150 A
48 VDC	30-150 A	110 VDC	10-200 A
110/220 VDC	30-200 A	220 VDC	10-100 A

Highlight

- Thyristor Controlled, Full Automatic System with Isolation Transformer
- Available for Using as DC Current Supply
- All Operating Values Adjustable
- Excess/Low Voltage, Over Current, Short Circuit Protection

Deskripsi

- The transformer of the battery charging device is an AC/DC Rectifier with automatic voltage regulation and constant current property. Isolated transformer and load and battery is completely isolated from the system. Thyristor control ensures fast regulation and voltage distortion in the mains does not affect the battery and load. With an L-C filter at the output, the AC to DC output fluctuation is less than 1%, helping to maximize the life of a charged battery.



Option individual outputs for battery and load

- Additional LVD contractor separating load and battery from each other
- Battery racks integrated into the rectifier
- Chassis with different protection class (IP31/IP42/IP54/IP65)
- DC +/- ground leakage protection
- Redundant operation with active or passive load sharing option
- Battery monitoring/management system (BMS)
- Analog hand measuring instruments
- Battery charge temperature compensation Modbus communication

OUR PRODUCT

YOSHIGA 6-FM-4.5



Voltage		12V
KapasitasTerukur (20 jam)		4.5Ah
Dimensi	Tinggi Total	4.2in / 107mm
	Tinggi	3.97in / 101mm
	Panjang	3.54in / 90mm
	Lebar	2.76in / 70mm
Berat		±3.3pon / 1.5kg

YOSHIGA 6-FM-5



Voltage		12V
KapasitasTerukur (20 jam)		5Ah
Dimensi	Tinggi Total	4.2in / 107mm
	Tinggi	3.97in / 101mm
	Panjang	3.54in / 90mm
	Lebar	2.76in / 70mm
Berat		±3.63pon / 1.65kg

YOSHIGA 6-FM-7



Voltage		12V
KapasitasTerukur (20 jam)		7.0Ah
Dimensi	Tinggi Total	3.94in / 100mm
	Tinggi	3.70in / 94mm
	Panjang	5.94in / 151mm
	Lebar	2.56in / 65mm
Berat		±4.84pon / 2.20kg

YOSHIGA 6-FM-9



Voltage		12V
KapasitasTerukur (20 jam)		9Ah
Dimensi	Tinggi Total	3.94in / 100mm
	Tinggi	3.70in / 94mm
	Panjang	5.94in / 151mm
	Lebar	2.56in / 65mm
Berat		±5.52pon / 2.51kg

YOSHIGA 6-FM-9s



Voltage		12V
KapasitasTerukur (20 jam)		9Ah
Dimensi	Tinggi Total	3.94in / 100mm
	Tinggi	3.70in / 94mm
	Panjang	5.94in / 151mm
	Lebar	2.56in / 65mm
Berat		±5.92pon / 2.69kg

YOSHIGA 6-FM-12



Voltage		12V
KapasitasTerukur (20 jam)		12Ah
Dimensi	Tinggi Total	3.94in / 100mm
	Tinggi	3.70in / 94mm
	Panjang	5.94in / 151mm
	Lebar	3.86in / 98mm
Berat		±7.92pon / 3.60kg

OUR PRODUCT

YOSHIGA 6-FM-14



Voltage		12V
Kapasitas Terukur (20 jam)		14Ah
Dimensi	Tinggi Total	3.94in /100mm
	Tinggi	3.70in /94mm
	Panjang	5.94 /151mm
	Lebar	3.86in /98mm
Berat		±9.25pon /4.2kg

YOSHIGA 6-FM-15



Voltage		12V
Kapasitas Terukur (20 jam)		15Ah
Dimensi	Tinggi Total	6.67in /167mm
	Tinggi	6.57in /167mm
	Panjang	7.13in /181mm
	Lebar	3.03in /77mm
Berat		±10.78pon /4.90kg

YOSHIGA 6-FM-17



Voltage		12V
Kapasitas Terukur (20 jam)		17Ah
Dimensi	Tinggi Total	6.57in /167mm
	Tinggi	6.57in /167mm
	Panjang	7.13in /181mm
	Lebar	3.03in /77mm
Berat		±11.22pon /5.10kg

YOSHIGA 6-FM-18



Voltage		12V
Kapasitas Terukur (20 jam)		18Ah
Dimensi	Tinggi Total	6.57in /167mm
	Tinggi	6.57in /167mm
	Panjang	7.13in /181mm
	Lebar	3.03in /77mm
Berat		±11.22pon /5.10kg

YOSHIGA 6-FM-20



Voltage		12V
Kapasitas Terukur (20 jam)		20Ah
Dimensi	Tinggi Total	6.57in /167mm
	Tinggi	6.57in /167mm
	Panjang	7.15in /181.5mm
	Lebar	3.03in /77mm
Berat		±13.20pon /6kg

YOSHIGA 6-FM-22



Voltage		12V
Kapasitas Terukur (20 jam)		22Ah
Dimensi	Tinggi Total	6.57in /167mm
	Tinggi	6.57in /167mm
	Panjang	7.15in /181.5mm
	Lebar	3.03in /77mm
Berat		±13.86pon /6.3kg

OUR PRODUCT

YOSHIGA 6-FM-24a



Voltage		12V
Kapasitas Terukur (20 jam)		24Ah
Dimensi	Tinggi Total	6.85in /174mm
	Tinggi	6.85in /174mm
	Panjang	6.64in /166mm
	Lebar	4.96in /126mm
Berat		±17.6pon /8kg

YOSHIGA 6-FM-26



Voltage		12V
Kapasitas Terukur (20 jam)		26Ah
Dimensi	Tinggi Total	4.96in /126mm
	Tinggi	4.96in /126mm
	Panjang	6.97in /177mm
	Lebar	6.57in /167mm
Berat		±18.48pon /8.4kg

YOSHIGA 6-FM-28



Voltage		12V
Kapasitas Terukur (20 jam)		28Ah
Dimensi	Tinggi Total	6.85in /174mm
	Tinggi	6.85in /174mm
	Panjang	6.54in /166mm
	Lebar	4.96in /126mm
Berat		±18.7pon /8.5kg

YOSHIGA 6-FM-33



Voltage		12V
Kapasitas Terukur (20 jam)		33Ah
Dimensi	Tinggi Total	6.65in /169mm
	Tinggi	6.10in /155mm
	Panjang	7.72in /196mm
	Lebar	5.16in /131mm
Berat		±22.22pon /10.1kg

YOSHIGA 6-FM-38b



Voltage		12V
Kapasitas Terukur (20 jam)		38Ah
Dimensi	Tinggi Total	6.70in /170mm
	Tinggi	6.70in /170mm
	Panjang	7.8in /198mm
	Lebar	6.54in /166mm
Berat		±26.4pon /12kg

YOSHIGA 6-FM-40



Voltage		12V
Kapasitas Terukur (20 jam)		40Ah
Dimensi	Tinggi Total	6.70in /170mm
	Tinggi	6.70in /170mm
	Panjang	7.80in /198mm
	Lebar	6.54in /166mm
Berat		±28.16pon /12.8kg

OUR PRODUCT

YOSHIGA 6-FM-45



Voltage		12V
Kapasitas Terukur (20 jam)		45Ah
Dimensi	Tinggi Total	6.70in / 170mm
	Tinggi	6.70in / 170mm
	Panjang	7.8in / 198mm
	Lebar	6.54in / 166mm
Berat		±30.36pon / 13.8kg

YOSHIGA 6-FM-50



Voltage		12V
Kapasitas Terukur (20 jam)		50Ah
Dimensi	Tinggi Total	8.39in / 213mm
	Tinggi	8.19in / 208mm
	Panjang	9.02in / 229mm
	Lebar	5.43in / 138mm
Berat		±35.64pon / 16.2kg

YOSHIGA 6-FM-55



Voltage		12V
Kapasitas Terukur (20 jam)		55Ah
Dimensi	Tinggi Total	8.54in / 217mm
	Tinggi	8.35in / 212mm
	Panjang	9.02in / 229mm
	Lebar	5.43in / 138mm
Berat		±41.6pon / 18.9kg

YOSHIGA 6-FM-65a



Voltage		12V
Kapasitas Terukur (20 jam)		65Ah
Dimensi	Tinggi Total	6.97in / 177mm
	Tinggi	6.97in / 177mm
	Panjang	13.8in / 350mm
	Lebar	6.57in / 167mm
Berat		±44pon / 20kg

YOSHIGA 6-FM-70



Voltage		12V
Kapasitas Terukur (20 jam)		70Ah
Dimensi	Tinggi Total	8.51in / 216mm
	Tinggi	8.31in / 211mm
	Panjang	10.24in / 260mm
	Lebar	6.65in / 169mm
Berat		±47.08pon / 21.4kg

YOSHIGA 6-FM-75



Voltage		12V
Kapasitas Terukur (20 jam)		75Ah
Dimensi	Tinggi Total	8.51in / 216mm
	Tinggi	8.31in / 211mm
	Panjang	10.24in / 260mm
	Lebar	6.65in / 169mm
Berat		±48.4pon / 22kg

OUR PRODUCT

YOSHIGA 6-FM-80



Voltage		12V
Kapasitas Terukur (20 jam)		80Ah
Dimensi	Tinggi Total	8.51in / 216mm
	Tinggi	8.31in / 211mm
	Panjang	10.24in / 260mm
	Lebar	6.65in / 169mm
Berat		±49.5pon / 22.5kg

YOSHIGA 6-FM-90



Voltage		12V
Kapasitas Terukur (20 jam)		90Ah
Dimensi	Tinggi Total	8.50in / 216mm
	Tinggi	8.31in / 211mm
	Panjang	12.1in / 307mm
	Lebar	6.65in / 169mm
Berat		±58.52pon / 26.6kg

YOSHIGA 6-FM-100a



Voltage		12V
Kapasitas Terukur (20 jam)		100Ah
Dimensi	Tinggi Total	8.66in / 220mm
	Tinggi	8.46in / 215mm
	Panjang	12.95in / 329mm
	Lebar	6.77in / 172mm
Berat		±60.94pon / 22.7kg

YOSHIGA 6-FM-100b



Voltage		12V
Kapasitas Terukur (20 jam)		100Ah
Dimensi	Tinggi Total	8.86in / 225mm
	Tinggi	8.86in / 225mm
	Panjang	16.1in / 409mm
	Lebar	6.97in / 177mm
Berat		±71.06pon / 32.3kg

YOSHIGA 6-FM-120



Voltage		12V
Kapasitas Terukur (20 jam)		120Ah
Dimensi	Tinggi Total	9.29in / 236mm
	Tinggi	8.19in / 208mm
	Panjang	16.02in / 407mm
	Lebar	6.85in / 174mm
Berat		±77pon / 35kg

YOSHIGA 6-FM-150b



Voltage		12V
Kapasitas Terukur (20 jam)		150Ah
Dimensi	Tinggi Total	9.49in / 241mm
	Tinggi	9.49in / 241mm
	Panjang	19.02in / 483mm
	Lebar	6.69in / 170mm
Berat		±99pon / 45kg

OUR PRODUCT

YOSHIGA 6-FM-200



Voltage		12V
Kapasitas Terukur (20 jam)		200Ah
Dimensi	Tinggi Total	9.06in / 230mm
	Tinggi	8.86in / 225mm
	Panjang	20.59in / 523mm
	Lebar	9.45in / 240mm
Berat		±132.66pon / 60.3kg

YOSHIGA 6-FM-250



Voltage		12V
Kapasitas Terukur (20 jam)		250Ah
Dimensi	Tinggi Total	8.86in / 225mm
	Tinggi	8.66in / 220mm
	Panjang	20.47in / 520mm
	Lebar	10.59in / 269mm
Berat		±151.8pon / 69kg

OUR PRODUCT

CHARGING PRODUCTS



EVD Series Integrated DC Charger

30-120kW

- Interactive interface display with 7 inch touchscreen
- APP-free charging
- High quality with easy operation
- High performance
- Easy instalation
- Compact design
- Power: Single pedestal danDual pedestal
- Hot plug feature and online maintenance for charger
- Support ethernet or wireless communication
- Online upgrades
- Various charging methods

Alat pengisi daya EVD Series Integrated DC Charger sangat ramah pengguna dan fleksibel. Mendukung komunikasi nirkabel dan cocok untuk semua kebutuhan Anda.

Features and Technologies

- Kapasitas 30-120kW
- Dimensi praktis dengan proses instalasi mudah
- Tampilan antarmuka interaktif dengan layar sentuh 7 inch
- *APP-free charging*
- Kualitas tinggi dengan pengoperasian mudah
- Kinerja tinggi
- Berbagai metode pengisian daya: Single Pedestal dan Dual Pedestal
- Fitur *hot plug* dan pemeliharaan online untuk pengisi daya
- Mendukung komunikasi ethernet atau nirkabel
- *Online upgrad*

OUR PRODUCT

SOLAR ENERGY

Energy Storage System

YOSHIGA RTH 192V Series

- ✓ Maximize power usage Supporting
- ✓ Energy Independence
- ✓ All-in-One Solution
- ✓ Save Your Electricity Bill

2-5kW



Intelligent Communication

- Maximize power usage Supporting Energy Independence
- All-in-One Solution Save Your Electricity Bill 2-5kW

Lithium-ion Battery

- Lifespan of more than 10 years
- Modular capacity up to 9.6kWh
- Smart battery management

Smart Energy Management

- Smart Energy Management System (EMS) for all usage modes Periodic energy generator records

Value-added Services

- Smart Transformer (CT) or Smart Meter (optional)
- Lead-acid Battery (optional)
- Power distribution cabinet

Backup Power

- Turn on backup power in case of network failure
- Charging settings DC/AC battery efficiency up to 94.8%

Item	RTH2000-B	RTH3000-B	RTH3600-B	RTH5000-B
PV Input				
Max. input daya PV (W)	2200	3300	4000	5000
Max. Voltage PV (Vdc)	480			
Rentang Voltage DC (Vdc)	160-480			
Rentang Voltage Full-load MPPT (Vdc)	200-420			
Nomor MPPT	2			
String Input Arus Max.	10	10	10	10

OUR PRODUCT



Yoshiga RTI Series Single Phase On-Grid String Inverter

Inverter solar terbaik, dilengkapi manajemen pintar ramah lingkungan yang memudahkan pemantauan dan penggunaan untuk beragam kebutuhan. Sangat efisien dengan jaminan keamanan dan perlindungan jangka panjang.

Efisiensi Tinggi

- Kapasitas 1.5-6kW
- Fasa 1
- Topologi inverter dengan efisiensi tinggi
- Algoritma kontrol canggih dan adaptif kepada grid, meningkatkan stabilitas

Aman dan Andal

- Perlindungan IP65
- Perlindungan petir AC/DC integratif
- Sasis aluminium, perlindungan hingga 25 tahun

Manajemen Pintar

- Pemantauan platform cloud cerdas
- Pemantauan real-time
- Mendukung RS485, GPRS, WIFI, dan lain-lain

Ramah Lingkungan

- Ukuran kecil, instalasi mudah
- Pendingin alami, tidak bising
- Temperatur pengoperasian sangat adaptif

OUR PRODUCT

GENERATOR



YOSHIGA Silent & Super Silent
Mode Generator

100-2000kVA 50 Hz 1500rpm 3P 400/230V

- Standard
- Perkins Machine
- S . Alternator *tamford*
- Cooling system
- Base frame (without fuel tank)
- Shock absorbers
- Air duct system
- Control box (including main floating charge)
- plastic fan

Accessories

- Silencer
- Below
- Exhaust system damper accessories (select machines)
- Standard battery
- Assembled cable
- Generator data
- Random tool (certain machine)

Optional

- Rangka dasar (dengan tangki bahan bakar)
- *Water jacket heater*
- *Fuel water separator*
- Pemanas bahan bakar
- Sensor bahan bakar (hanya mendukung tangki bawah rangka)
- Kotak sakelar
- Saklar daya
- Sensor level air
- *Anti condensation heater motor*
- Sistem pengisian bahan bakar otomatis (hanya mendukung rangka dasar dengan tangki bahan bakar)
- Rangka baterai

OUR PRODUCT



MAKELSAN® Generator

Uninterruptible Power Supplies

22-2500kVA

DIESEL ENGINE

- Industrial Type 4 Stroke Water Cooled 1500 rpm
- Electronic or Mechanical Type Fuel System
- Dry Type Changeable Air Filter
- Changeable Type Fuel and Oil Filter
- 40-50 Degree Optional Radiator Mounted
- Control and Security System
- Starter and Charge Alternator
- Thermostat Controlled Water Heater System
- Electronic Type Fuel Level Indicator

ALTERNATOR

- 400/230 VAC 50 Hz Standard
- Suitable for 60 Hz Operating Conditions
- Single and Maintenance Free Bearing System
- Insulation Class H
- Protection Class Standard IP21/23
- Electronic Type Automatic Voltage Regulator
- Stator Winding 2/3 Step

GENERATOR SYSTEM PROTECTION FEATURES

- Low Water Level Warning
- High Engine Cooling System Heat Alarm
- Low Lubrication Oil Pressure Alarm
- High and Low Engine Speed (Hz) Alarm
- Over Current (Power) Alert and Alarm

SOUND PROOF CANOPY

- Modular Type Sound Proof Canopy Produced with Galvanized Sheet
- Anti-Rust Phosphate Cleaning
- Electrostatic Oven Paint Protection
- According to Canopy Size, 2 or 4 Points to Lift and Ready to Move
- Emergency Stop Button on Canopy
- Control Panel on Canopy
- Lockable and Easy-to-Care Doors
- Out of Canopy Fuel Filling System
- Silencer Mounting Compartment in Cabin

OPTIONAL FEATURES

- External Type Prismatic Fuel Tank (500-10000 Lt)
- External Type Cylindrical Stainless Fuel Tank (500-10000 Lt)
- Manual or Automatic Fuel Filling System
- Fuel and Water Separator Filter
- Diesel Engine Oil and Fuel Heating System
- Diesel Engine Analogue Indicators
- Specification Custom Control System
- Synchronization Systems (Jen-Jen and Jen-Network)
- Remote Monitoring System
- Alternator PMG Warning System
- Alternator Dehumidifier Heater System
- Critical Type and Hospital Type Silencer Systems
- Public Works Type Canopy System

- Generator High and Low Voltage (Voltage) Alarm
- Fuel Level Warning
- Battery Low Voltage Warning
- Battery Does Not Charge Warning
- Generator Start/Stop Alarm

OUR PRODUCT

CRAC COMPUTER ROOMAIR CONDITIONING



CRAC Yoshiga Station Air Series

CRAC Yoshiga StationAir Series merupakan sistem pendingin udara ruang komputer yang memiliki efisiensi tinggi dan komponen teruji. Desain ringkas dan dapat digunakan dalam segala situasi.

Features and Technologies

- Kapasitas 5.5-20.5kW
- Efisien dengan biaya operasional rendah cocok untuk *data center* dan stasiun telekomunikasi
- EER standar 3.0 dengan efisiensi hingga 3.5
- Aliran udara depan dan bawah
- Refrigeran R410a
- Perlindungan kata sandi ganda
- Fungsi *auto-start*
- Komponen teruji dengan desain terstandar
- Komponen efisien
- Pengaturan kecepatan kipas dan kondensor senyap
- Berbagai jenis sumber pasokan udara

OUR PRODUCT



CRAC Yoshiga FocusAir Series

CRAC Yoshiga FocusAir Series merupakan sistem pendingin udara ruang komputer yang dapat menyesuaikan suhu dan aliran udara otomatis. Cocok untuk *data center* atau kebutuhan perkantoran lain.

Features and Technologies

- Kapasitas 25-70kW
- Solusi pendingin ruang tertutup
- Instalasi berbasis rak
- Sensor suhu ganda, monitoring suhu real-time
- Aliran udara ke bagian depan kabiner
- 3 ukuran dengan 3 jenis pendingin, dan 4 aliran udara
- Desain kipas redundan, dapat diganti tanpa mengganggu operasi mesin
- Fungsi *auto-start*
- Pengaturan suhu dan kelembaban
- Pendingin, penghangat, pengatur kelembaban, penyaringan udara
- Kontrol manual komponen utama
- Kompresor DC inverter
- Kipas EC menyesuaikan aliran udara otomatis

OUR PRODUCT



CRAC Yoshiga MatrixAir Series

CRAC Yoshiga MatrixAir Series merupakan sistem pendingin udara untuk ruang komputer yang ramah lingkungan, terstandar, dan dilengkapi dengan sistem kontrol pintar. Cocok untuk kebutuhan *data center* dan *network room*.

Features and Technologies

- Kapasitas 26.7-104.4 kW
- Sistem kontrol pintar
- Protokol multi unit grup
- *Remote monitor* dari protokol komunikasi umum
- Tampilan grafis status dan alarm
- Tampilan dan pengaturan parameter lingkungan
- Penampil waktu dan notifikasi pemeliharaan komponen utama
- Perangkat pelindung
- Komponen teruji dengan desain terstandar
- Desain modular pendingin, dan 4 aliran udara
- 100% perawatan dari panel depan
- Refrigeran ramah lingkungan R407c dengan ODP 0

OUR PRODUCT

X-RAY SYSTEM

PRODUCT LINEUP

X-ray System

Mobile X-ray System

POX-100BT, POX-
100DR, POXBILE-
320UC

Stationary X-ray System

HI-300, HI-500,
Ceiling

C-Arm

MCA6200-PRO

Portable Veterinary

PXM Series

Imaging System

Flat Panel Detector Bontech

BT-DA22-IA

BT-DB22-IA

BT-DA24-IA

BT-DB24-IA

BT-DA22W

Therapeutic Devices

Shortwave Diathermy

HIPER-500

Shortwave Therapeutic

HIPER-1000

OUR PRODUCT



GROUP PRODUCT X-RAY SYSTEM



MOBILE X-RAY SYSTEM



MODEL (POX-100BT)

- 100mA, 5.0kW Battery Powered
- Experience high imaging resolution
- Mobile X-ray system for Medical
- Charge input: 100V - 240 VAC, 50/60Hz
- Net Weight: 140kg
- User-friendly & smooth movement



Main Specifications

- Generator Type:** 5.0kw, 60khz BATTERY TYPE
- Kv Range:** 40~110kv, 1.0kv increment
- mA Range:** 20~100mA, variable
- mAs Range:** 0.1~100mAs, 38selections
- Console & Display:** KV & mA & mAs/sec digital display
- Software:** PROM Memory: 30 APR
- X-ray Tube:** Focal spot size: 1.8mm
- Laser Pointer:** Single & Dual laser (Optional)
- Auto Compensation:** Line voltage comp. $\pm 10\%$



OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

MOBILE X-RAY SYSTEM

MODEL (POX-100DR)

- 100mA, 5.0kW Battery Powered
- Experience high imaging resolution
- Charge input: 100V - 240 VAC, 50/60Hz
- Ideological design for Mobile Application
- User-friendly & smooth movement

Connected with Flat Panel X-ray Detector



BT-DA22W

- Wireless
- Size: 14x17
- Scintillator: CsI



BT-DA24-IA

- Wired
- Size: 17x17
- Scintillator: CsI

Main Specifications

- Generator Type:** 5.0kw, 60khz BATTERY TYPE
- Kv Range:** 40~110kv, 1.0kv increment
- mA Range:** 20~100mA, variable
- mAs Range:** 0.1~100mAs, 38selections
- Console & Display:** KV & mA & mAs/sec digital display
- Software:** PROM Memory: 30 APR
- X-ray Tube:** Focal spot size: 1.8mm
- Laser Pointer:** Single & Dual laser (Optional)
- Auto Compensation:** Line voltage comp. $\pm 10\%$
- Net Weight:** 140kg



OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

MOBILE X-RAY SYSTEM

MODEL (POXBILE-320UC)

Main Specifications

- Constant Output: 25.0kW
- Tube kV/mA: 125kV/320mA
- KV Range: 50-125kV
- mAs Range: 0.4-320mAs



320mA Battery Powered Mobile

Strong Output of 5-25kW, Battery Powered Unit

Strong output power and excellent high frequency technology produce most clean and sophisticated x-ray images.

Maximized diagnostic convenience

Diverse angles and up-down of head find the optimal positioning of radiography work. It is designed for the maximum use of space utility in clinics with slim body and foldable frame when it is not used. Big and stable wheels drive safe and smooth movement. The system can be transported and installed by single person and technical calibration is very simple.

OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

STATIONARY X-RAY SYSTEM

HI series (HI-300/HI-500)

- Excellent HFG technology & production knowledge.

Main Specifications HI-300

- Generator Type: Capacity - 32kW
- Kv Range: 40~125kv
- mA Range: 10~320mA
- mAs Range: 0.1~630mAs
- Time Range: 0.001~10sec

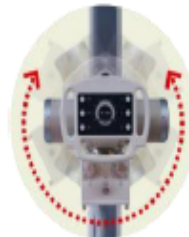
Main Specifications HI-500

- Generator Type: Capacity - 40kW
- Kv Range: 40~125kv
- mA Range: 10~500mA
- mAs Range: 0.1~630mAs
- Time Range: 0.001~10sec

ecatalogue
Belanja Cerdas Cara Tepat

LKPP
Lembaga Kebijakan
Pengadaan Barang/Jasa Pemerintah

UL FDA CE



- 3 Kinds of Tube Stand System
- 240° Rotation
- Floor-mounted Tube Stand
- Floor-Ceiling mounted Tube Stand
- Ceiling Suspended Tube Stand

OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

STATIONARY X-RAY SYSTEM

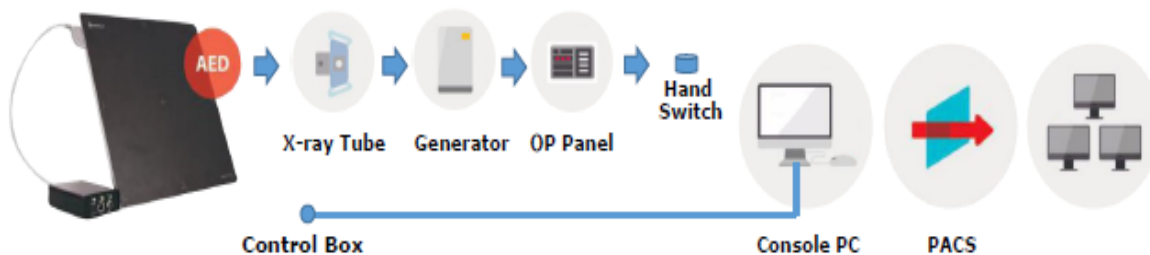
MODEL (HI-500 DIGITAL)

Our newest PXR is an improved version of the Generator that is most suitable for the Digital X-ray and General X-ray Systems.

Connected with Flat Panel X-ray Detector



Configuration



OUR PRODUCT



GROUP PRODUCT X-RAY SYSTEM



C-Arm System

MODEL (MCA6200-PRO)

Main Specifications MCA-6200

-  **Max. Output:** 3.5 kW
-  **KV Range:** 40-110 kV
-  **mA Range:** 0.2-5.0 mA
-  **Line Power:** 220VAC

MCA6200-PRO Digital C-Arm System



High-quality Imaging



-  **High Frequency Generator: C-Arm**
50 KHU Stationary Anode 3.5 -12kW
Radiography & Fluoroscopy

OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

Hybrid Portable X-ray System

PXM Series for Veterinary

- Lightest weight and compact body size are maintained regardless of battery installation.

Main Specifications

Model	VET-20BT	PXM-20BT	PXP-40HF
KV Range	50-90kV	40-100kV	40-100kV
mA Range	8-20mA	15-20mA	16-35mA
mAs Range	0.4~20mAs	0.4~50mAs	0.4~100mAs
Power Rating	1.6kW	1.6kW	2.4kW
Dual Laser Pointer	Standard	Optional	Optional
Tube Focal Spot(mm)	1.2x1.2	1.2x1.2	1.2x1.2
Target Angle	19°	16°	16°
Weight(kg)	6.8	10.6	14
Battery Charger	16.8V/1.5A	29.9V/1.5A	58.8V/1.5A
Charging Time	3.5 Hours	3.5 Hours	3.5 Hours
Packing Dimension	51x36x37cm (17kg)	51x36x37cm (17kg)	51x36x37cm (17kg)



OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

High Frequency Generator

PXR SERIES

High Power, High Frequency

Our quality X-ray systems are mainly dependent on excellent HFG technology and production know-hows.

Standard and customized generator for your needs

Large capacity and stable x-ray output
Comprehensive power capacity ranging from 20kW to 80kW. Excellent high frequency technology provides the best diagnostic images.

Programmed calibration for tubes and cables
Easy adjustment for technical data upon sorts of tube and cables.

Fast fault detection with error code display
Users can define and analysis encountered situation and find solutions.

Maximum 500 anatomical views for optimal radiography
This software find the optimal technical values for the best radiography.

User friendly operation console and data display
Several types of operation consoles are available upon your application.



OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

High Frequency Generator

PXR SERIES (AEC, ABC, PC Console, PSU)

Auto Exposure Function

AEC function calculates the accumulated exposure amount and limit excessive radiation dose.

Auto Brightness Control

ABC function adjusts the brightness of radiography automatically upon the physical trait of the subject and maintain stable quality of images.

High Speed Rotor

High speed rotor maximizes the utility of tube capacity and helps to use higher power of the generator.

PC Based Control

Operation software with state of art configurations (veterinary/human) can be supplied with your option for a general PC monitor or touch screen LCD.

PSU Capacitor Bank

Equipped with power supply unit inside the cabinet and easier approach to use without electrical constructions. The body can be moved freely unlike general type fixed on the ground.



OUR PRODUCT

GROUP PRODUCT X-RAY SYSTEM

 **High Frequency Generator**

 **PXR SERIES (Dedicate to OEM/ODM)**

 **High Power, High Frequency**

Our quality X-ray systems are mainly dependent on excellent HFG technology and production know-hows.



OUR PRODUCT

GROUP PRODUCT IMAGING SYSTEM

Flat Panel Detector (DR)

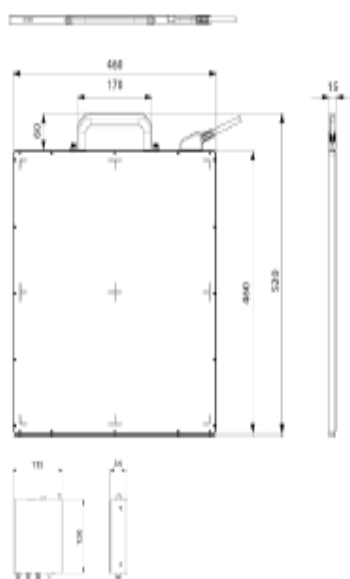
BSD4343 (BT-DA24-IA/BT-DB24-IA)

Main Specifications

Cassette Type PORTABLE

- Smart Exposure Detection (SED)
- Slim Design & Light Weight
- High Image Quality
- Convenience & portability

Dimensions



High Value Product with
Lower Investment

Sensor: a-Si With PIN diode

Scintillator: GOS/CsI:TI

Weight: Less than 5kg

Image View Time: Less than 3 sec

Pixel Resolution: 3072 x 3072

Pixel Pitch: 140 um

AD Converter: 16 bit

Maximum Dose: 80 uGy

Power: DC 12V, 2.5A

Removable



OUR PRODUCT

GROUP PRODUCT THERAPEUTIC DEVICES

 Shortwave Diathermy

 HIPER-500

 High Frequency Stimulator

Model	HIPER-500
Weight	37kg
Size	800mm(H) x 450mm(W) x 370mm(D)
Maximum Output	300W
Power Consumption	300VA



JS-ON

The Quality of Life



OUR PRODUCT

GROUP PRODUCT THERAPEUTIC DEVICES

Shortwave Energy Therapeutic Device

HIPER-1000 (For Pain Relief)

High Frequency Stimulator

Improve your body's condition and functioning

Model	HIPER-1000
Weight Main Body	11kg
Weight Cart	26kg
Dimensions Body	220mm(H) x 440mm(W) x 330mm(D)
Dimensions Cart	800mm(H) x 450mm(W) x 520mm(D)
Voltage	AC 220V, 50Hz/60Hz
Frequency	4.4MHz
Maximum Output	350Vpp
Power Consumption	250W



JS-ON

The Quality of Life



OUR PRODUCT

X-Ray and Medical Solutions
www.acomax-ray.com

High Frequency Conventional
Digital Radiography System

HI-500

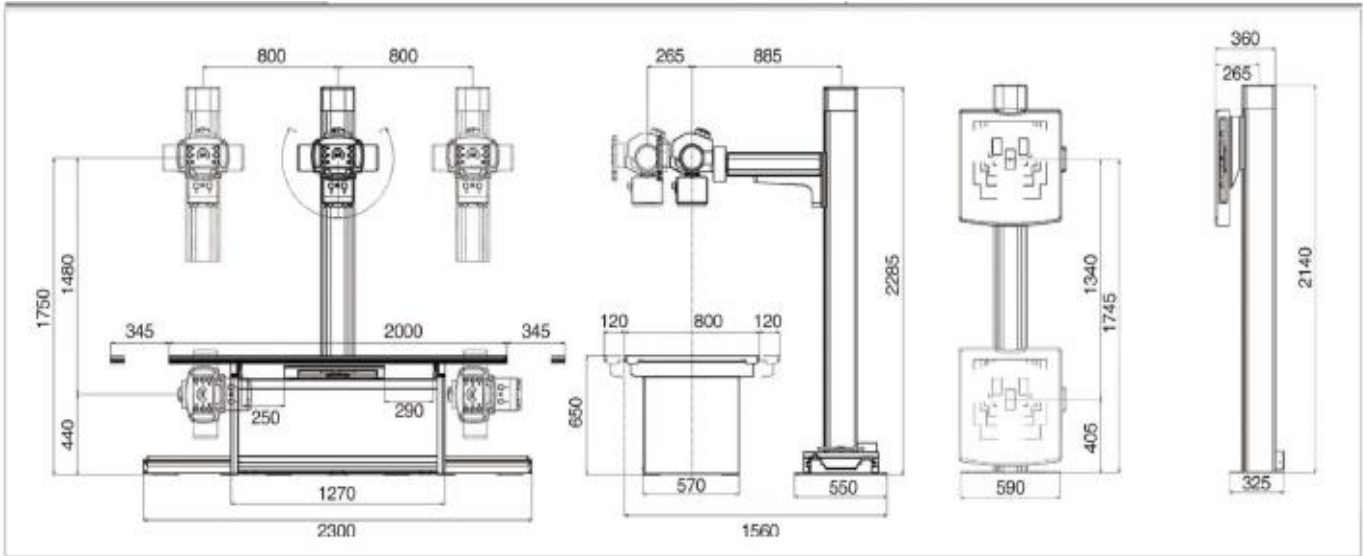


OUR PRODUCT

Technical Specifications

Generator	Capacity	40kW
	KV Range	40~125kV
	mA Range	10~500mA
	mAs Range	0.1~630mAs
	Time Range	0.001~10sec.
	Frequency	40kHz
	Anatomical Programming	216 APR
Tube	Anode heat storage capacity	140 kHU
	Focal Spots	1.0 / 2.0mm Dual
	Target Angle	16° rotating at high speed
	Max Tube Voltage	125kV
Floor mounted Tube Stand	Vertical Movement	1480mm
	Horizontal Movement	1550mm
	Transversal (telescopic) Movement	±265mm
	Column Rotation	360° (±180°)
	X-ray Tube Rotation	240° (±120°)
Floor-Ceiling mounted Tube Stand	Vertical Movement	1480mm
	Horizontal Movement	2400mm
	Transversal (telescopic) Movement	±265mm
	Column Rotation	360° (±180°)
	X-ray Tube Rotation	240° (±120°)
Bucky Table	Type	4-Way floating wide tabletop
	Tabletop Size	2000 x 800mm (±10%)
	Horizontal Movement	690mm
	Lateral Movement	240mm
	Bucky Device Movement	520mm
	Max. loading	200kg
Wall Bucky Stand	Vertical Movement	1340mm
Power Connection	Single phase, 220/230 VAC, 50/60 Hz	
Optional Flat Panel Detector	Size and Type	17x17 in, a-Si TFT array Flat Panel Detector
	Sensor and Image Data	3,702 x 3,702 (9.4 M pixels) and 16 Bit
	Data Transfer and Capture Cycle Time	Less than 1 sec. and 2~5 sec. (approx)
	Data Output	Gigabit Ethernet and IEEE 802.11ac

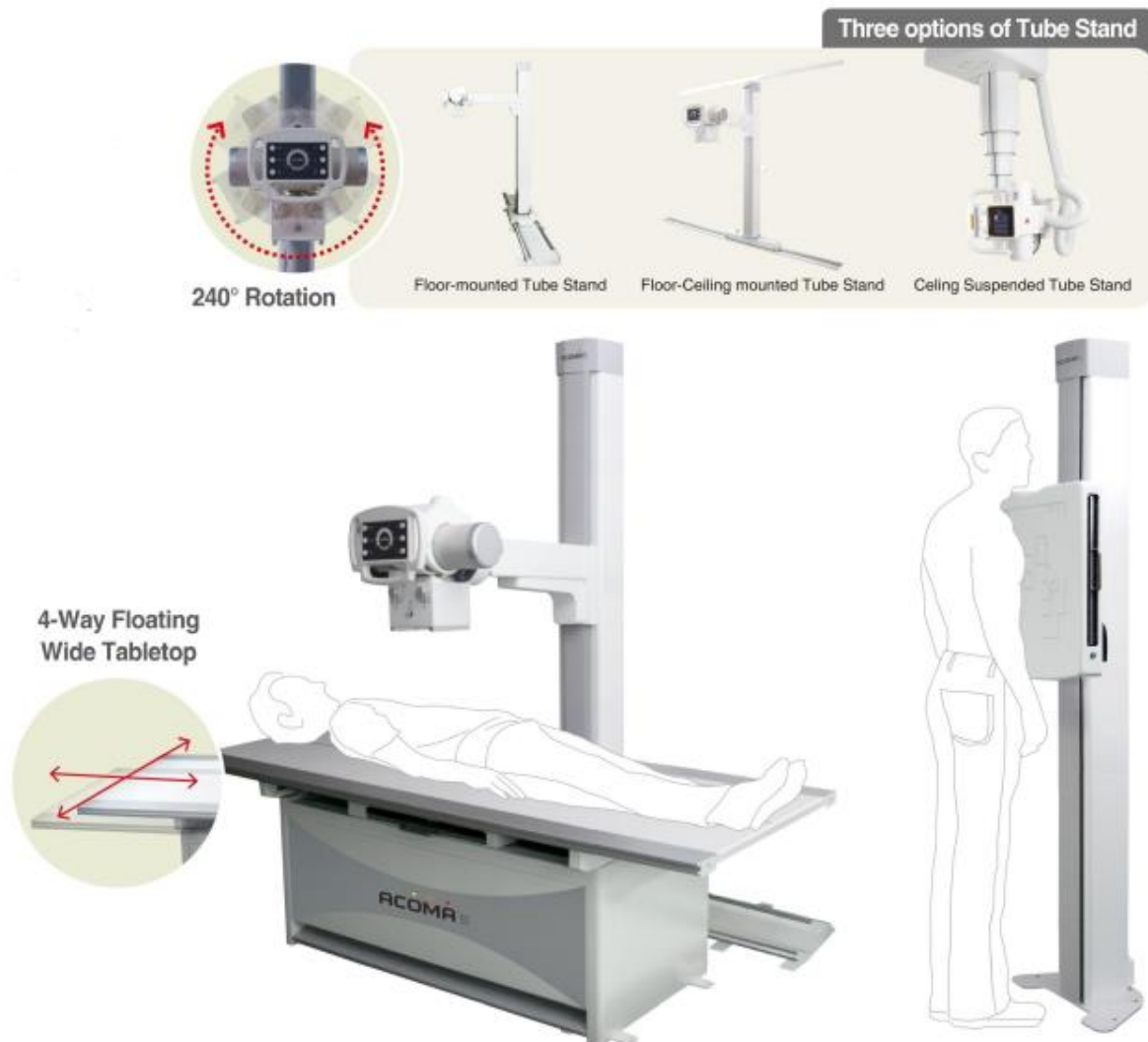
OUR PRODUCT



HI-500 High Frequency Conventional/Digital Radiography System

HI-500 is the most efficient choice applicable both for digital and analogue environments. The digital compatible and field upgradeable system offers the most cost-effective solutions and the great versatility in any clinical environment. The high frequency X-ray Generator and the powerful rotating anode tube with dual focal spots ensures the confident diagnosis with the optimal quality image creation for all the general radiological purposes such as traumatological, orthopedic and medical examination centers, etc. its X-Ray tube stand which freely rotates 240° and the floating table top with the large range of longitudinal and transversal movements allow the exposures from various angles and easy and fast positioning so both patients and X-Ray staffs feel comfortable.

OUR PRODUCT



CONVENIENT, EFFICIENT AND HIGH PERFORMANCE

OUR PRODUCT

Convenient

- Powerful rotating anode X-Ray to pivot 240 degree which allows exposures from various angles
- Anatomical Programmed Radiography (APR) for optimized image quality at low dose
- Intuitive and user friendly control console
- Self-diagnostic circuit and error code display
- One touch buttons for fast positioning and exposure

Efficient

- Outstanding image quality for faster and more confident diagnosis
- Ergonomic and robust design for safer and more accurate positioning
- Dual focal spot tube for thin/large part
- Smooth movement of tube stand and bucky devices
- Electro-magnetic lock system for patient safety

High Performance

- Superb image quality with high frequency xray generator
- DR ready-integration ideal for both conventional and digital applications
- Specialized mounting hardware for different digital panels is available upon request
- DICOM/PACS connectivity as well as the independent image archiving

Digital Radiography System (Optional)



DR Upgrade

Option 1: Economical choice
Single Detector : Sharable for wall stand and table

Option 2: Choice for high productivity
Dual Detector : Each for wall stand and table

OUR PRODUCT

BONTECH'S CASSETE TYPE PORTABLE DETECTOR



OUR PRODUCT

Smart Exposure Detection (SED)

SED Advances Auto Exposure Detection by reducing error rate and enabling larger area detection to improve efficiency and stability for radiology professionals.

High Image Quality a-Si based TFT technology with low noise enhances image quality with constant & reliable image acquisition.

Slim Design & Light Weight advances technology provides slim, light & compact external which enhances conveniences for radiology professionals.

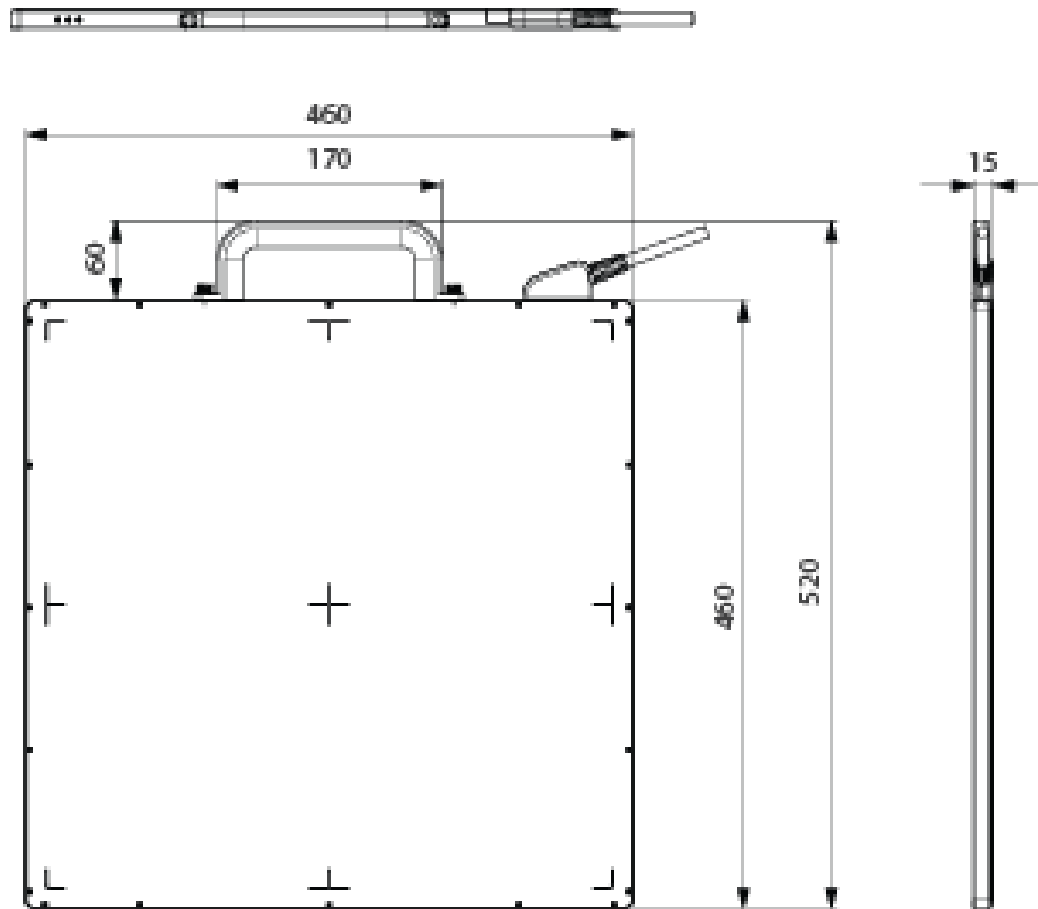
Convenience and Portability Hand-removable handle allows convenient attachment/removal without using tools.



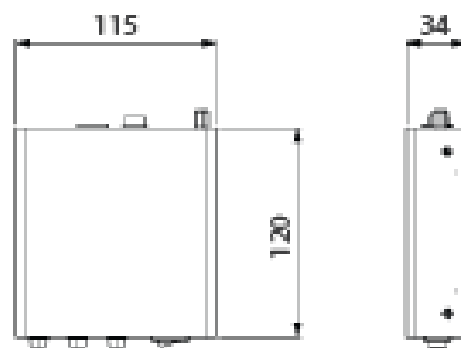
OUR PRODUCT

BSD4343 (BT-DA24-IA / BT-DB24-IA)	
Sensor Type	a-Si With PIN diode
Scintillator	GOS / CsI:TI
Dimension	460 x 460 x 15 mm (ISO 4090 cassette size)
Weight	Less than 5kg
Active Pixel Area	430.08 x 430.08
Pixel Resolution	3072 x 3072
Pixel Pitch	140 um
AD Converter	16 bit
Maximum Dose	80 uGy
X-ray Generator Interface	Trigger Mode Smart AED Mode
Image Preview Time	Less than 3 sec
Image Cycle	10 sec
Interface	Gigabit Ethernet (1000BASE-T)
X-ray Voltage Range	40 ~ 150 kVp
Operation Environment	15 ~ 35 °C, 30 ~ 80% RH (non-condensing)
Power	DC 12V, 2.5A
Component	Control Box

OUR PRODUCT



Detector (BT-DA24-IA / BT-DB24-IA)



Control Box (BT-CB02)