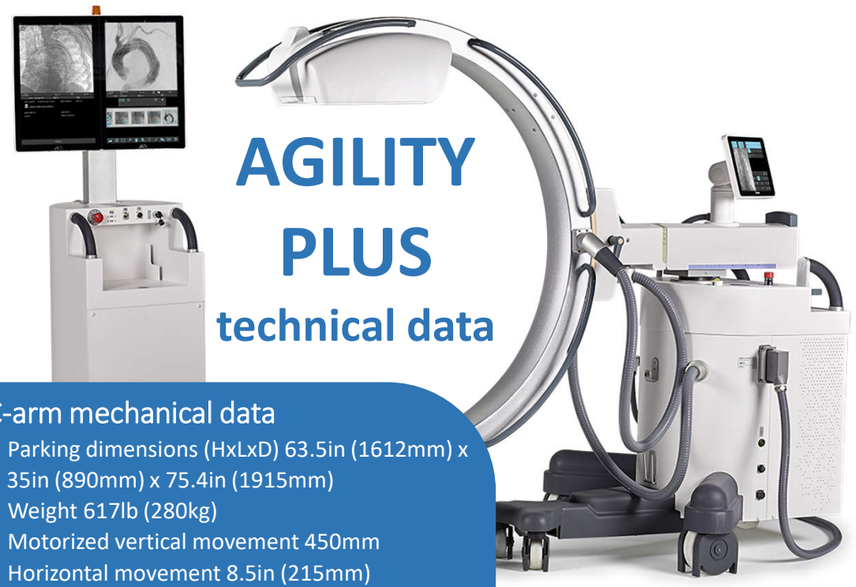

AGILITY PLUS

technical data

C-arm mechanical data

- Parking dimensions (HxLxD) 63.5in (1612mm) x 35in (890mm) x 75.4in (1915mm)
- Weight 617lb (280kg)
- Motorized vertical movement 450mm
- Horizontal movement 8.5in (215mm)
- Panning movement ±12°
- Rotation ±275°
- Motorized rotation ±45° (optional)
- Orbital rotation 160° (65°÷95°)
- Mechanical balancing on all movements
- SID
    - 42in (1066mm) (detector 21x21)
    - 42.5in (1080mm) (detector 30x30)
- Free space in C-arm
    - 31.8in (810mm) (detector 21x21)
    - 32.3in (821mm) (detector 30x30)
- C-arm depth 27.8in (707mm)
- Min height of the monobloc from the ground 117mm
- Manual movements except vertical movement
- Mechanical brake except vertical movement
- Color-coded brake handles
- Handles along the entire C
- Positioning handle on detector housing
- Directional handle with integrated brake
- Balanced weight for ease of positioning and overcoming small obstacles
- Cable sweepers on the four wheels
- Wheel cover in soft plastic material
- Printer holder housing
- Structure of the “C” in aluminum

View station mechanical data

- Parking dimensions (HxLxP) 1580x765x765mm
- brakes on all four wheels
- Cable sweepers on the four wheels
- Monitor rotation ±180°
- Monitor height adjustment 25cm
- Power cord 19.7ft (6m)
- Connection cable with C-arm 19.7ft (6m)
- Anti-crush connection cable

Connection connector with protection flange

Power supply

- Single phase power supply
- Voltage 120 Vac, 230 Vac ± 10%, 50Hz, 60 Hz
- Max. consumption in Fluoro 16A (120kV-8mA average)
- Max. consumption in Rad 22A (100kV-25mAs)
- Consumption in Standby 400VA
- Power connectors available
    - IEC 309
    - SCHUKO
    - BS 1363
    - NEMA 5-20P

Environmental working conditions

- Temperature 10-35°C
- Relative humidity 20-70 % (without condensation)

Generator

- Frequency 40kHz
- Voltage range 40-120kV
- Voltage resolution 1kV
- Ripple <1%
- Max power
    - 4kW (5kW)
    - 20kW (20kW)
- Current range in fluoroscopy
    - 0.4-40mA (5kW)
    - 0.4-100mA (20kW)
- Fps in pulsed fluoroscopy pps 1,2,3,4,6,8,12,15,25
- Current range in Rad mode
    - 23-100mA (5kW)
    - 23-200mA (20kW)

Monobloc

- Max power 20kW
- Heat content 1020kJ (1377kHU)
- Heat dissipation
    - 150W - 12kHU/min
    - 270W - 21,6kHU/min (with active cooling)
- Filtration 3mmAl_{eq} (@70kV)
- Maximum loading time in fluoroscopy
    - 53min 60sec ON, 60 sec OFF @15i/s, 75kV, 6mA_{avg}
    - 87min 60sec ON, 60 sec OFF @15i/s, 75kV, 6mA_{avg} (with active cooling)
- Radiation dispersion < 0,8mGy/h @120kV-4mA scopia

X-ray tube

- Anode material RTM
- Focal spot 0,3-0,6mm
- Anode angle 10°
- Anode diameter 73mm
- Anode heat content 225kJ (300kHU)
- Max heat dissipation 1300W (104kHu/min)
- Anode speed 3,000rpm
- Nominal anode input power
    - 6kW (small focus)
    - 25kW (large focus)
- Nominal tube voltage 130kVp
- Average duration 5,000 hours in fluoroscopy

Collimator

- Multiple field collimation
- Symmetrical and asymmetrical collimation
- Virtual collimation without radiation emission
- Automatic collimation on the acquisition fields
- Additional automatic filtrations
    - 2mmAl
    - 1mmAl + 0,1mmCu
    - 1mmAl + 0,2mmCu

Dose Area Meter (optional)

- Sensitivity 1mGy x cm^2
- The dose data is stored in the exam
- Possibility of sending with DICOM RDSR
- Management of different units of measurement

Integrated Laser (optional)

- Class1M
- Positioned on the detector and on the monobloc
- Switching on and off from the control panel
- Automatic power off

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Detector 21x21

- Technology Amorphous Silicon matrix (aSi)
- Scintillator Cesium Iodide
- Sensitive area 207x207mm
- Pixel size 154 micron
- Matrix 1344x1344 pixels
- Resolution 3,2lp/mm
- A/D Conversion 16bit
- Dynamic Range 96dB
- Signal to electronic noise ratio
    - 12dB (binning 1x1 a 5nGy)
    - 18dB (binning 2x2 a 5nGy)
- Passive cooling
- Max acquisition frame rate 25 frame/s
- Automatic Offset calibration
- Field of view 21, 16, 12
- Compactness index 0.4
- Maximum vertical dimensions (detector–C) 24cm
- DQE @ 2 µGy, RQA5
    - 77% @ 0 lp/mm
    - 56% @ 1 lp/mm
    - 46% @ 2 lp/mm
- MTF
    - 80% @ 0,5 lp/mm
    - 59% @ 1 lp/mm
    - 29% @ 2 lp/mm

Detector 30x30

- Technology Amorphous Silicon matrix (aSi)
- Scintillator Cesium Iodide
- Sensitive area 301x301mm
- Pixel size 154 micron
- Matrix 1956x1956 pixel
- Resolution 3.2lp/mm
- A/D Conversion 16bit
- Dynamic Range 96dB
- Signal to electronic noise ratio
    - 9dB (binning 1x1 a 5nGy)
    - 16dB (binning 2x2 a 5nGy)
- Passive cooling
- Max acquisition frame rate 25 frame/s
- Automatic Offset calibration
- Field of view 30, 21, 16
- Compactness index 0.4
- Maximum vertical dimensions (detector–C) 24cm
- DQE @ 2 µGy, RQA5
    - 77% @ 0 lp/mm
    - 57% @ 1 lp/mm
    - 48% @ 2 lp/mm
- MTF
    - 80% @ 0,5 lp/mm
    - 59% @ 1 lp/mm
    - 29% @ 2 lp/mm

Grid

- Material Al
- Ratio 8:1
- Lines/cm 80
- Carbon protective cover
- Removal without tools

Monitors

- 21.5” dual monitor
- Technology color LCD
- Multi Touch surface
- Resolution 1920x1920 (Full HD)
- Contrast ratio 5000:1
- Brightness 1000cd/m^2 (max)
- Viewing angle 178° H/V

Control panel

- 13” display
- Technology color LCD
- Multi Touch surface
- Resolution 1920x1080 (Full HD)
- Brightness 400 cd/m^2 (typ)
- Contrast ratio 1000:1
- Rotation ±135°
- Tilt -5° +30°
- Synchronization with monitors

Video Processor

- CPU Intel i7
- S.O. Windows 10 LTSC 2019 64bits
- RAM 16Gbyte
- Hard Disk
    - 500 Gbyte SSD per SW
    - 1 Tbyte SSD for images
- Storage of static and dynamic images
    - 270.000 with detector 21x21 (max resolution)
    - 65.000 with detector 30x30 (max resolution)
- 3 USB available
- Socket for equipotential connection
- Infrared remote control
- Ethernet 1Gbps
- Wi-Fi dual band (optional)
- Interface with injector (optional)
- Operating mode
    - Low Dose
    - High Quality
    - High Contrast
    - One Shot
    - Radiography
- Command systems
    - Programmable three-function button
    - Cable footswitch with two programmable pedals
    - Wireless footswitch with two programmable pedals (optional)
- X-ray emission signaling
    - On trolley and on view station with lamp
    - With sound signal (adjustable volume)
    - Wireless mode on room lamp with DSL kit (optional)
- Possibility of exporting DICOM and graphic images
    - USB storage devices (optional)
    - CD/DVD burner (optional)
    - LAN with DICOM (optional)

Accessories

- Active cooling
- Extension kit (only for motorized versions)
    - Additional 13" color touch screen control panel
    - Two 21.5" Full HD external monitors with table stand
    - 15m of video, power and connection cable
    - Footswitch with cable
- DAP (Dose Area Product)
- Wireless footswitch
- Login with NFC card
- Laser centering
- DSA acquisition
- Connector for contrast media injector
- DSL kit for turning on room lights wirelessly
- WLAN DICOM Wi-Fi
- CD/DVD burner
- Medical A4 printer
- Additional Control Panel
- DICOM
    - Worklist
    - Store
    - Print
    - Query/Retrieve
    - Media Export
    - MPPS
    - Storage Commitment
    - RDSR

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Software

- Designed for use with touchscreen interface
- Intuitive and ergonomic interface
- Access with Emergency user with limited functionality
- Patient archive database
- Manual patient entry
- Import patients and tests from worklists
- Reopening of previous exams
- Search filter on exam database
- Automatic cancellation of exams
- Reconciliation from worklist
- Exam database with image preview
- Setting the maximum dose for the exam
- Automatic dose control
- Real-time storage of images on HDD
- LIH automatic storage
- Automatic movement of images saved on Meme monitor
- Freeze images on Meme monitor
- Switch Live – Meme monitor
- Image acquisition at fps 1,2,3,4,6,8,12,15,25
- Acquisition of image sequences from 1 to 25 fps without time limitations
- Noise reduction with recursive filter
- Image enhancement with DRC (Dynamic Range Compression) system
- Edge enhancement
- Spatial filters (Smooth and Sharp)
- Rotation and inversion of images
- Pin of significant images
- Adaptive ROI to optimize quality and patient dose
- Automatic and manual mode
- Automatic and manual cine loop
- Viewing of images stored by control panel and Meme monitor
- Automatic and manual W/L adjustment
- Zoom and PAN
- Max zoom 4x
- “Full screen” image
- Collimator adjustment directly on the image
- Maximum dose alert setting
- Automatic and manual sequence storage
- Drawing lines and graphic objects on the monitor
- Stopwatch on Live Monitor and Control Panel
- Laser activation/deactivation
- Viewfinder centering display on monitor
- Automatic ABC ROI
- Automatic removal of metal artifacts
- Grayscale inversion
- Motion Detection for the reduction of motion artifacts
- Selection of fields with preview of the acquisition area
- Real-time display of dose and kerma
- Insertion of free and predefined texts
- Insertion of lines and graphic objects
- Measurements of lengths and angles
- Calibration of measurements
- Image histograms with min, max and avg value
- Creation of dose reports
- Mosaic monitor division
- Crop images
- Cineloop display, with selection of parts of sequence
- Image-by-image playback
- Print on local printer
- Export exams on USB and CD/DVD (optional)
- Possibility of anonymization of exports
- Insertion of DICOM viewer on export
- Export in DICOM, BMP, Jpeg, AVI, MP4 format

Safety and security

- Access with User/Password login
- Multilevel users
- Access with Smart Card
- Possibility of data encryption
- Encryption system for information sent over the network
- Password with complexity, duration criteria, repeatability
- Emergency buttons on C-arm and view station
- 5 minutes fluoroscopy timer
- Active control system of the monoblock and anode temperature with algorithm to avoid interruptions
- Rx activation button on Control Panel and Live monitor
- Electromechanical safety on vertical motor movement

DSA e Road Mapping (optional)

- DSA with pedal and dedicated button
- Different pre and post mask modes
- Automatic and/or manual mask activation
- Automatic Cineloop
- Remask in post processing
- Pixel shift
- Landmarking
- Vascular tracing
- Automatic calculation of stenosis
- Roadmapping manually or using previous DSA runs
- Activation of contrast media injector (optional)

Dose reduction

- Laser on monobloc and detector
- Adaptive ROI
- Asymmetric collimator
- Additional filtrations
- Virtual collimation
- Low dose mode with dedicated buttons
- Pulsed fluoroscopy at low frames
- Automatic recognition of the anatomical part
- Automatic dose control

Exam protocols

- Pre-programmed protocols
  - Very low dose exams
  - Orthopedic
  - Traumatological
  - Neurosurgical
  - Operations on the column
  - Pain therapy
  - Urology
  - Gastro
  - Endoscopy
  - Pneumothorax
  - Peripheral vascular (optional)
  - Vascular interventional (optional)
  - Cardiological
  - Generic interventional (stents, ports, etc.)
  - Cerebral vascular (**optional**)
- Ability to create new protocols
- Customization of existing protocols
- Disabling unused protocols
- Switching on the equipment with automatic selection of the last protocol used

DICOM (optional)

- DICOM 3 protocols
  - Store
  - Worklist
  - Storage commitment
  - MPPS
  - Print
  - Query/Retrieve
  - RDSR
- Export in DICOM for processing
- Management of default DICOM nodes
- Management of multiple DICOM nodes
- Monitor display of the RDSR report
- Automatic DICOM sending at the end of the exam

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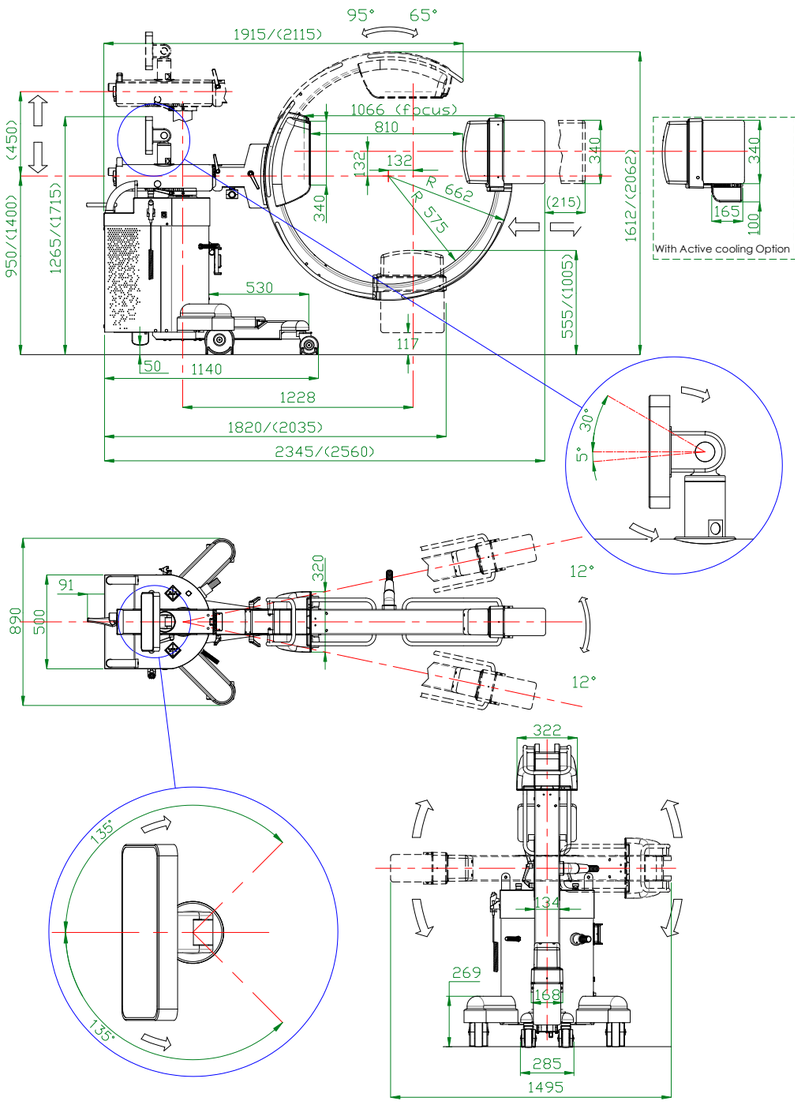
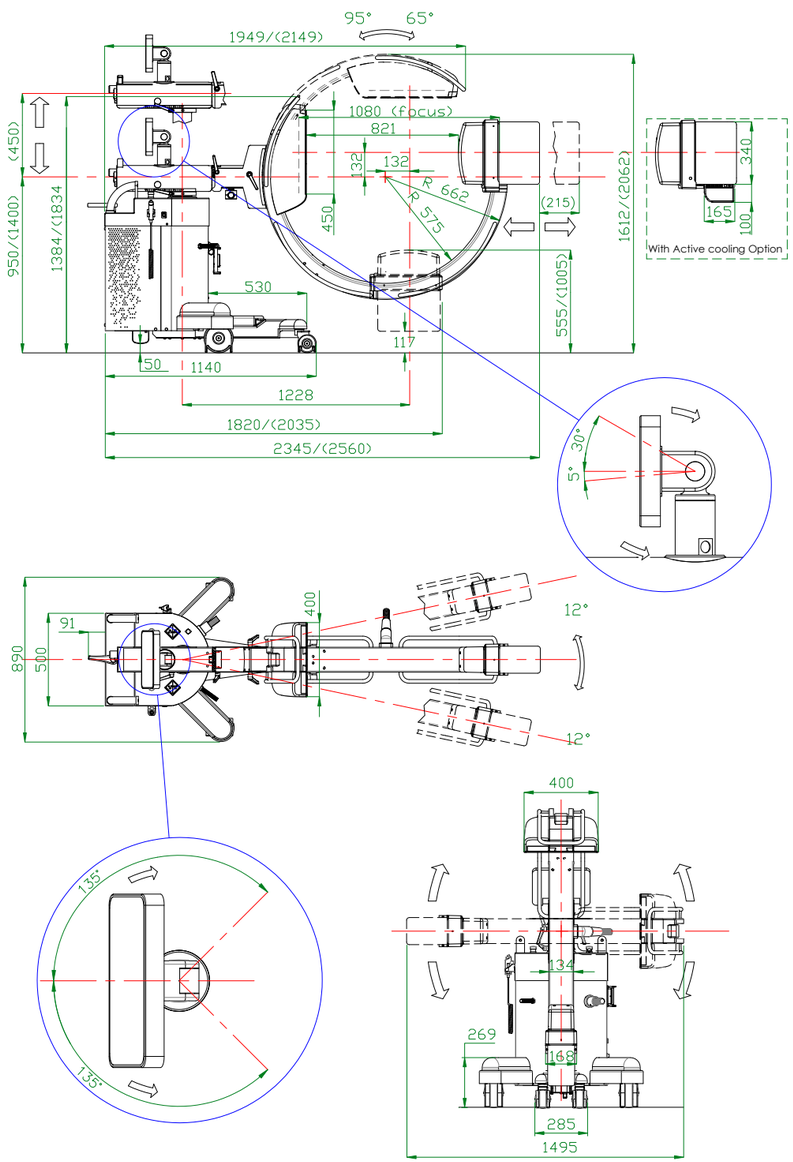
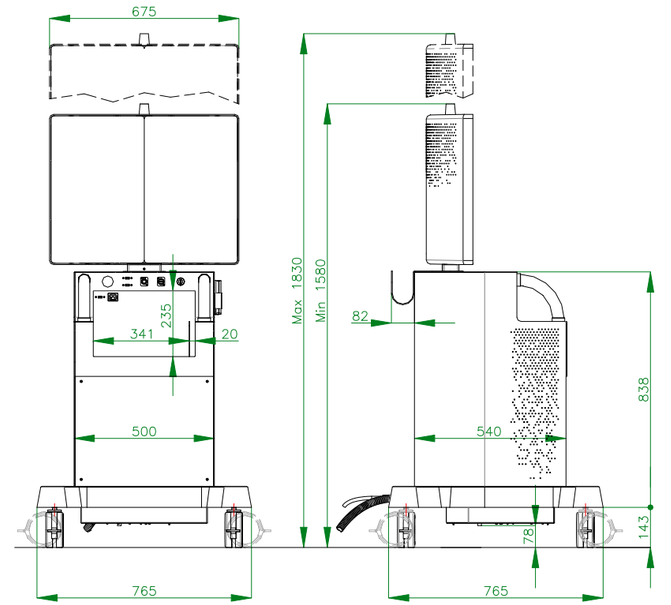
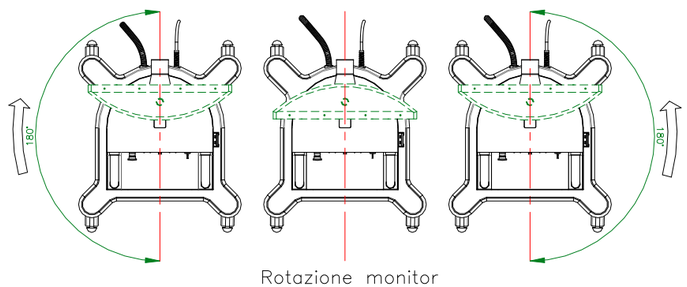
AGILITY PLUS 2121 model



AGILITY PLUS 3030 model







Rotazione monitor

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