

## Technical Specifications

### IHE standard HL7 v2.6 (compatible with 2.x by mapping)

BeneVision Central Station  
 BeneVision N22/N19/N17/N15/N12/N1  
 BeneView T9/T8/T6/T5/T1/TDS  
 ePM 15/12/10/12M/10M  
 iPM 12/10/8  
 iMEC 15/12/10/8  
 uMEC 12/10  
 PM 9000/8000/7000  
 MEC 2000/1200/1000  
 VS 900/800  
 BeneHeart D6/D3  
 BeneHeart R12 /R3 (only ADT function)  
 BeneVision TM80  
 TMS-6016 via Central Station

### Number of connected devices

Up to 200 terminals connected at the same time

### Data output protocol

IHE standard HL7 v2.6 (compatible with 2.x by mapping)

### ADT Service

Supports ADT listen mode  
 Supports ADT query mode

### Result Service

Support 4 channel result data transmission

Transmission modes    Unsolicited-Client mode  
                                  Unsolicited-Server mode  
                                  Solicited Server mode  
                                  Solicited Client/Server mode

Data resolution            30s/1min/2min/3min/4min/5min/10min/  
    15min/30min/45min/60min

### Alarm Service

Supports 3 channel alarm transmission

The data includes            alarm type, alarm limits, alarm priority, alarm  
    state and alarm waveform

### Report Service

Support sharing XML/PDF reports

Sharing modes                File copy  
    Contents of reports by ORU  
    Reference of reports by ORU  
    Contents of reports by MDM  
    Reference of reports by MDM

### Full Disclosure

Supports 1 channel high resolution Full Disclosure transmission

### Timing service

Supports getting time information from NTP server to synchronous devices' time

### Data Backfilling

Supports 48 hours 1 minute resolution data backfilling

### Virus protection

McAfee™ SolidCore S3  
 McAfee™ VirusScan Enterprise 8.8

### Operating system requirements

Windows Server 2016 Standard 64bit  
 Windows Server 2012 R2 Standard 64bit  
 Windows Server 2008 R2 Standard SP1 64bit  
 Windows Server 2008 Standard SP1 32bit  
 Windows 10 LTSB 2016  
 Windows 7 Professional SP1 32bit  
 Windows 7 Professional SP1 64bit

### Hardware configuration requirements

CPU                            2.9G 4Core  
 Memory                     4G DDRIII 1600MHz  
 Hard-disk                    500G SATA  
 Network adapter          100M/1000M Ethernet 802.3  
 Display                      Resolution 1280\*1024

### Virtualization environment requirements

VMware ESXi 5.1.  
 CPU                            2.4G, 4Core, default settings  
 Memory                     4GB  
 HD partition 1(Operating system & eGateway application)  
    40GB, Thick Provisioned, dependent mode  
 HD partition 2 (data)  
    60GB, Thick Provisioned, dependent mode  
 Network adapter          100M/1000M

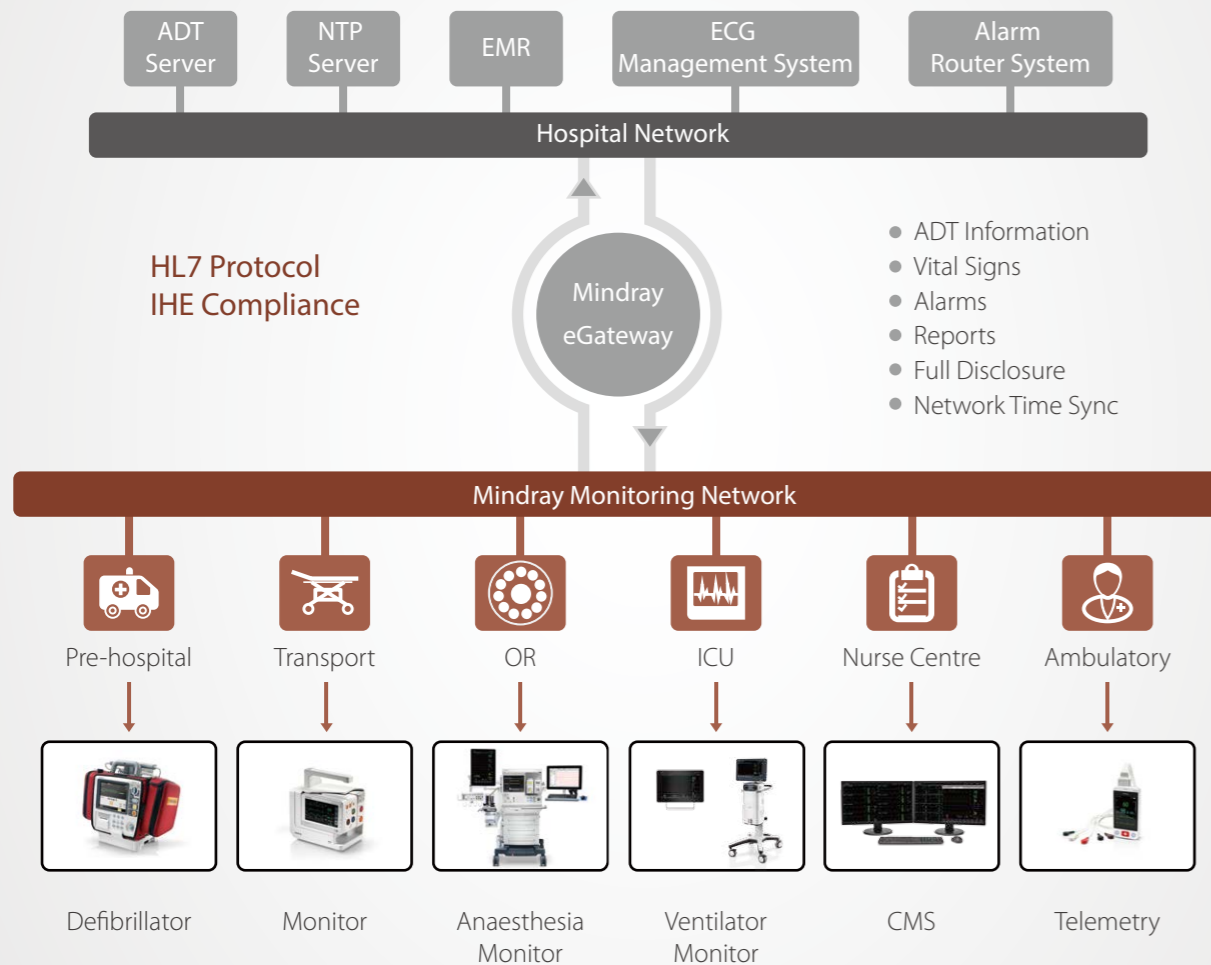
# eGateway

Enterprise integration solution

## Superior Data Connection



eGateway is a member of the Mindray monitoring product family and is the bridge between hospital information systems and Mindray monitoring system. It provides bi-directional communication, sending comprehensive data which includes vital signs, alarms, reports and full disclosure to the hospital information system. Besides, it can download patient demographics from hospital ADT Servers to Mindray monitoring system.



## Extended compatibility

### Compatible with Clinical Information Systems

eGateway uses the standard IHE HL7 protocol, making it easier to connect with almost all clinical information systems from current mainstream vendors. eGateway supports five transmitting methods including: unsolicited-client, unsolicited-server, solicited-server, solicited-client/server and file. This makes eGateway extremely flexible and compatible with various information systems. With the built-in HL7 edit engine, the Mindray Service Team can help you connect Mindray devices or your existing information system quickly and at a reasonable cost.

The comprehensive setting of eGateway makes it customisable to satisfy all your connection requirements.

### Compatible with medical devices

eGateway not only supports connection to all Mindray patient monitors, but also Mindray anaesthesia machines and ventilators through BeneLink. For other vendors' devices including infusion pumps, anaesthesia machines and ventilators, connection can be achieved to Mindray patient monitors by using BeneLink modules and their data can also be sent to eGateway via the Mindray monitoring network.





## Superior reliability

### Data Safety

Protecting the safety of your data has been fully considered. eGateway can support 48 hours of data, backfilling for both medical devices and information systems which meet the requirement, whether it is an unpredictable network interruption or intentional network maintenance. It also supports using another eGateway for redundancy, avoiding lost data through a single point of failure.

### Data Security

ePHI disclosure can cause serious consequences for both patients and the hospital. eGateway adopts a sophisticated encryption strategy to protect ePHI security. SSL and XXTea encryption have been used for patient monitor side communication and IPSec for information system side communication. ePHI in eGateway is also protected by windows EFS.

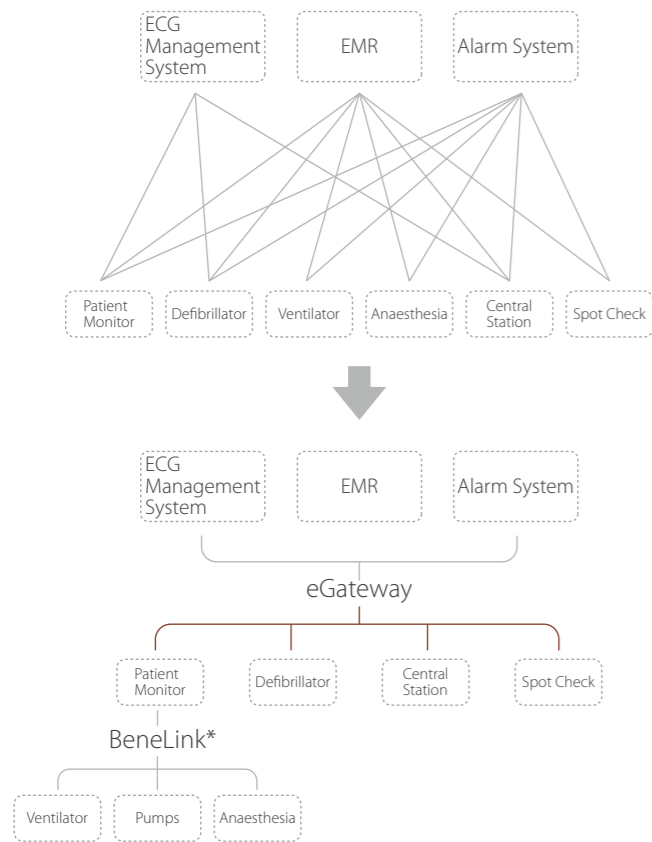
### Meets Hospital IT strategies

To meet Hospital IT strategies, eGateway supports running under Windows General User permissions and joining the hospital domain. It also supports anti-virus programmes such as McAfee Application Control and McAfee VirusScan Enterprise 8.8, making it more reliable. System patch lists can be issued regularly to you by our Service Centres.

# More economic

## Reduce connection costs

Up to 200 medical devices can be connected to one eGateway and the data from all of these devices can be sent to the clinical information system through one interface. This not only reduces the license fee for connecting clinical information systems but also reduces your communication costs for connection because eGateway is consolidating data from multiple medical devices.



Direct connection  
More connections cause more collaborative costs  
more license fee and more maintenance investment

Through eGateway  
eGateway makes the infrastructure simpler and  
reduces most of the connections, decreasing you  
investment outlay

\* The medical devices which connect to BeneLink  
could be other vendors' devices

## Reduce maintenance costs

eGateway can be Virtualised by using the existing VMware virtual server in the hospital and supports joining windows domains, meaning eGateway can be centrally managed. This makes the network more stable and migration more convenient, helping to reduce maintenance costs.

