# NEXT GENERATION

### **AMBU WIRELESS**



Ambu

Discovering the new independance

# Ambu<sup>®</sup> – YOUR STRONG PARTNER



## All Ambu manikins are continuously adapted and enhanced to meet the changing requirements of modern professional training.

This means considering not only the latest medical techniques, but also, the change in training concepts and didactic teaching methods. In addition to the anatomical and physiological authenticity of the manikins, quality and durability above all lie at the heart of these developments. The functionality and durability of all Ambu manikins are tested intensively. The mechanical construction of the manikins also keeps maintenance costs down.

Together with good customer service and comprehensive spare parts availability, Ambu manikins offer a long-term, cost-effective and reliable solution for professional medical training, as well as basic first-aid training.





#### THE FUTURE BEGINS WITH W...

... for wireless. Ambu showed this back in 2009 by being the first provider on the manikin market to develop a fully integrated wireless solution.

Ambu Wireless Technology was born and now allows a new level of scenario-based training. In 2016, Ambu went one step further.

Based on customer feedback, we have enhanced Ambu Wireless Technology and created a completely new concept that is perfectly tailored to the needs of modern course concepts for Advanced Life Support (ALS).

# WHAT DOES MMM STAND FOR?

#### **Ambu® WIRELESS MANIKINS**

#### **Infinite**

According to the 2020 ERC Guidelines, realistic scenario-based training is essential - unleash your creativity and discover the new possibilities the AmbuMan Advanced has to offer!

#### Realistic

Familiar and realistic anatomy. A highlight of the AmbuMan Advanced is the representation of a patient monitor with 12 lead ECG display.

#### Easy

Open the Ambu Manikin Management Module in the browser - without any additional software installation!

# AmbuMan® Wireless The all-rounder for CPR:

can be used both with healthcare professionals and to train non-professionals. Features the licence-free self-training module and Ambu hygiene system.



#### AmbuMan® Defib

The specialist in early defibrillation offers the basic functions of the AmbuMan Wireless with additional defibrillation option.



#### Flexible

Connect from virtually any PC, tablet or smartphone wirelessly and platform independent!



#### Secure

Complete separation of the network configuration level and the training/control level - ready to start in minutes!



#### AmbuMan® Airway Wireless

The specialist in airway management: for training in both endotracheal intubation and alternative techniques like laryngeal mask or laryngeal tube.



#### **Unlimited**

Parallel multiple access of different terminal devices for performance visualisation possible. Furthermore, the monitoring module can be adapted to your individual requirements.

#### Individual

The option to provide individual evaluation in group training ensures effective training. Each participant receives their own personal results (up to four participants).

#### Independent

The AmbuMan Wireless features a licence-free self-training module as standard which allows training stations to be set up and non-trainer-specific training to be conducted at any time.

#### AmbuMan® Advanced

The professional for professionals. Ambu's new generation of manikins, perfectly adapted to the training of Advanced Life Support (ALS).



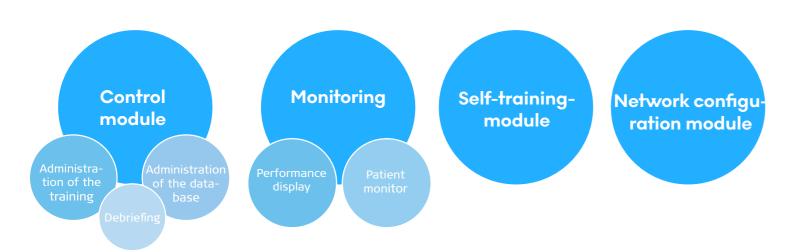
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# DISCOVERING THE NEW INDEPENDANCE

# What else independently? Discover infinite scenarios

**The network configuration level** has been separated completely from the training and control level. This provides added convenience and security for your training. Once the manikin has been set up, it is ready to start within minutes.

**Making your life easier**...the different modules can be configured individually and adapted to the requirements of your course concepts.



#### **CREATE YOUR OWN SCENARIO**

Simulate resuscitation in conjunction with standard emergency procedures, like transportation and repositioning. Even airway management in a trapped car can be realistically simulated and practised. Meanwhile, you can supervise the scenario from a safe distance.

Thanks to the wireless transmission of the most important parameters of the CPR, the training can be conducted with a high level of mobility.



#### The wireless star - connect your manikins

To conduct a group training session, you connect several manikins together to form what is known as a star network: all of the manikins are connected to a central hub, the master manikin. For training, we recommend connecting five manikins to one master to ensure that the displays remain clear.

#### Because you can connect with your Ambu manikin wirelessly from virtually any PC, tablet or smartphone.

Ambu Wireless supports all modern network connection options that the TCP/IP network offers.

Furthermore, all AmbuMan Wireless Manikins are fitted with NFC technology, which allows a fast and uncomplicated connection.\*





#### **CPR Feedback in real time**

The option to provide individual evaluation in group training ensures effective training in all course content. Each participant receives their own individual results.

#### **Durability and robustness**

The Ambu training range offers innovation based on tried-and-tested quality.

#### Your creativity

With all of the ideas you have for creating realistic training, scenario-based training comes alive. The days of forming a circle with a manikin in the middle are long gone. Discover new possibilities.

#### Wireless mobility and flexibility

#### No wiring, concentrate fully on the training

Unwanted acess to the network becomes a thing of the past.

The manikin is the centrepiece of the training, and after an initial one-time configuration in the network configuration module, the manikin is ready for the next training session within minutes.

If you are conducting training outdoors, Ambu Wireless offers the highest level of mobility, with a range of up to 50 m.

#### If training is taking place in a building,

you can use the training rooms according to your requirements and adapt the network to the space available; or transmit the training parameters to other rooms onto different terminal devices simultaneously, for example onto a Smart Wall or different tablets.

<sup>\*</sup>Requirement: your terminal device must support NFC.

# MANIKIN MANAGEMENT MODULE - FEATURES

#### The software that can do more!

#### A new level of debriefing

For the first time, the Ambu Manikin Management Module makes it possible to carry out individual appraisals in group training. Using the switch function, every trainee is assigned their individual training content. This means that every trainee receives their individual appraisal and results (up to four participants).



#### **Customisable ECG simulation**

The Ambu Manikin Module contains an ECG module which you can use to simulate an ECG, cardiac arrhyt mias and artefacts wirelessly on the AmbuMan Advanced and AmbuMan Defib. It was particularly important that the ECGs were physiologically accurate and that they would be correctly detected by an external defibrillator. The module offers extended options and you can change existing ECG rhythms or create your own!



#### Interaction

All parameters can be exported/imported. This gives you the option of changing the parameters between different Ambu Wireless manikins and therefore of interacting between different centers.



#### **Event management**

Select the events from the algorithms, such as "Speak to and shake"or "Tilt head and lift chin", to fix them within the time-frame of the resuscitation. During the resuscitation and as part of the evaluation or subsequent review, you can measure and discuss the times between the events.



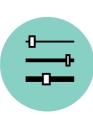
#### Playback of sound files

On the AmbuMan Advanced it is possible to play back sound files, such as breathing in the scenario. You can also install your own individual sound files onto your manikin.

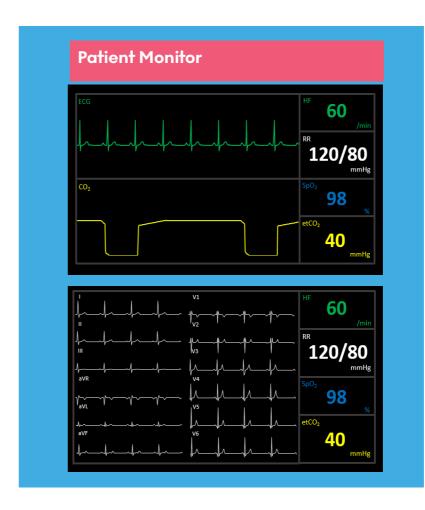


#### **Customisable displays**

Make the most of the flexible display options within the monitoring module. The display can be adjusted flexibly to the requirements of the audience.



# REALISTIC REPRESENTATION OF PHYSIOLOGICAL PARAMETERS



#### A highlight of the AmbuMan® Advanced

is the representation of a realistic patient monitor with the following display options: 12 lead ECG, heart rate, blood pressure, oxygen saturation, capnography and capnometry.

The physiological parameters can be configured individually by the trainer and changed during the training session and are immediately visible to the trainee.



Simulate resuscitation in conjunction with standard emergency procedures, like transportation and repositioning. Even airway management in a trapped car can be realistically simulated and practised. Meanwhile, you can supervise the scenario from a safe distance.

Thanks to the wireless transmission of the most important parameters of the CPR, the training can be conducted with a high level of mobility.

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#### **AmbuMan WIRELESS MANIKINS**

Specifications

Mouth-to-mouth ventilation Mouth-to-nose ventilation Bag valve mask ventilation Use of Guedel airways

Jaw-thrust manoeuvre Gastric insufflation Ambu hygiene system

Lung bag

Airway management: endotracheal tube, laryngeal tube, laryngeal mask, other SGAs



AmbuMan Wireless

√ (Optional)

AmbuMan

√ (Optional)



A265 407 000

AmbuMan Defib

✓ (Optional)



AmbuMan Airway

AmbuMan Airway



AmbuMan Advanced

	Face masks	✓	✓	✓			
	Chest compression	✓	✓	✓	✓	✓	✓
	Hand position display	✓	✓	✓	✓	✓	✓
	Infinitely adjustable chest stiffness	✓	✓	✓	✓	✓	✓
	Pulse	√ (Manual)	√ (Manual)	✓ (Electric)	✓ (Manual)	√ (Manual)	✓ (Electric)
	Placement of defibrillation electrodes	✓	✓	✓	✓	✓	✓
	Defibrillation (up to 360 joules)			✓			✓
	ECG display			✓			✓
	Transthoracic pacing option			✓			✓
	i.v. access	✓ (Optional)	✓				
	i.o. access	✓ (Optional)	✓				
	Advanced feedback display (ventilation volume, compression depth, hand position, gastric insufflation)	✓	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>
	Ambu Wireless Technology		✓	✓		✓	✓
	Ambu Manikin Management Module		✓	✓		✓	✓
Control module	Platform-independent access and control options		✓	✓		✓	✓
	Browser-based access and control option		✓	✓		✓	✓
	Parallel control of up to 6 manikins		✓	✓		✓	✓
	Scenario-based training (individually programmable)						✓
	Manual event management		✓	✓		✓	✓
	User-defined programming of ECG rhythms			✓			✓
	Debriefing (individual documentation of up to 4 participants)		✓	✓		✓	✓
	Playback of sound files e.g. breathing						✓
	Parameter export/import		✓	✓		✓	✓
Monitoring module	Patient monitor display of physiological parameters like 12 lead ECG, heart rate, blood pressure, oxygen saturation, capnography and capnometry						<b>√</b>
	Performance display (customisable)		✓	✓		✓	✓
	Parallel display of up to 6 manikins		✓	✓		✓	✓
	Parallel multiple access of different terminal devices		✓	✓		✓	✓
Self-training module	Licence-free self-training		✓	✓		✓	
Network configuration module	Secure separation of network level and training/control level		✓	✓		<b>√</b>	<b>√</b>
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### And, what are all possibilities to...

## Implement the AHA/ERC content in your training sequences using our products?

#### Simulation and training of realistic scenarios

Simulating situations as realistically as possible is seen as an essential part of resuscitation training according to the Guidelines. There are virtually no limits with the wireless generation to your creativity or the individualconfiguration of emergency settings.

#### Debriefing: recommendation on improving CPR

Debriefing following training, during which objective facts are discussed openly, can help improve CPR.

With the Ambu Manikin Management Module you can start an in-depth discussion by referring to all of the events that have been recorded.

#### Increased focus on non-technical skills (NTS)

Using scenario-based training, important skills like leadership, teamwork, task allocation and structured communication can be taught creatively and comprehensively.

#### Refresher courses to maintain skills

After a while, knowledge and skills acquired though training begin to decline. The Ambu Manikin Management Module offers a database function!

Allowing you to save your participants individual performance and compare them with each other in subsequent training sessions!

#### Can we ask for more?



Platform independence

Individual Realistic

#### A HISTORY OF BREAKTHROUGH IDEAS

In 1957 Phantom was born. The world's first training manikin, the first AmbuMan was used to demonstrate the Ambu® Bag™

Later, the CPR Pal, the Ambu Simulator, Intubation Trainer appeared... 28 years later the first AmbuMan CPR Software emerged.

Driven by the innovation of the founders and always in close cooperation with users, the "AmbuMan" family has grown over the years from the AmbuMan® School to AmbuMan® Basic, through the Ambu-BLS family and AmbuMan® Advanced.

The manifestations of our efforts have ranged from early innovations like the Ambu® Bag™ resuscitator and the Ambu® BlueSensor™ electrodes to our newest landmark solutions.

Moreover, we continuously look to the future with a commitment to deliver innovative quality products that have a positive impact on your work.

Headquartered near Copenhagen in Denmark, Ambu employs approximately 4,200 people in Europe, North America and Asia Pacific.

#### Ambu takes environmental issues seriously

Some of the greenest companies in the world are based in Denmark, and Ambu is inspired by this tradition.

Ambu environmental targets: 100% phthalate-free products by 2020. 95% PVC-free for products released after 2025. All packaging reusable and biodegradable by 2025.

For more information, please visit ambu.com/emergency-care-and-training/training-manikins

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