CYPRES 2

Reliability made in Germany

CYbernetic **P**arachute **RE**lease **S**ystem

Military Equipment Catalog

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Issue 2022-03
Art.No.: 14121211

The most sophisticated Automatic Activation Device in the world:

Release Unit

The waterproof cutter body is made from X14CrMoS17 stainless steel. This unit contains the only moving part of the CYPRES, a cutter blade piston. The cutter has enough power to easily cut steel ripcord cable in the blink of an eye.

Control Unit

All CYPRES functions can be accessed using a simple, single-button interface. All user interactions with CYPRES are designed to be simple and to require minimal input.

Processing Unit

All CYPRES electronics are contained in the rugged, waterproof casing, which is small and lightweight with rounded edges. The casing protects the unit against any outside influence or EMP disturbance.

Military CYPRES 2

Released in 2003, the Military CYPRES 2 is the world's most sophisticated AAD (Automatic Activation Device). It combines German high-tech engineering with outstanding quality and reliability.

CYPRES is the most advanced AAD you will find on the market today. More than 100 countries rely on Military CYPRES for their parachuting operations. More than 100,000 CYPRES units are in service today around the world.

To use in training mode, simply switching on the unit prior to boarding the aircraft will enhance the safety of parachute operations for the next 14 hours. By making the handling as simple as possible, we minimize the risk of a stressed soldier making an error during input. While the unit is on the ground, the electronic processing unit will automatically compensate for weather-induced pressure changes at rapid intervals, throughout its functioning period. The CYPRES senses the take-off and acceleration of the aircraft and will begin to monitor any action taken by the parachutist. This allows soldiers to focus their full attention on the mission at hand.

When it comes to the mission the Military CYPRES 2 demonstrates its superior technology. It can be switched on to operational mode even during flight in an active pressurized cabin and can be set for any target – using simple, user-friendly one-button handling.

The CYPRES system is an independent back-up safety system that will not interfere with or restrict normal parachuting activity in any way. It is designed to activate in emergency situations where the parachutist is unable to perform the proper procedures. This does not threaten the mission objective.

CYPRES responds to pressure inputs detected by the sensing unit, with speed and altitude transducers generating the activation criteria.

The appropriate CYPRES model choice will depend on the characteristics of the particular harness/container system and reserve canopy and the particular mission parameters involved. Contact the manufacturer of your parachute/container system for further assistance. It may be appropriate to increase the activation altitude for specific scenarios.

Depending on the CYPRES model being used, it will activate at various preset altitudes when the speed exceeds a given setting.

The reserve activation is initiated by the EOS release unit (cutter). This cutter simply severs the closing loop of the reserve container and allows the reserve deployment sequence to begin.

This unique activation method was invented and patented by Helmut Cloth, the founder of Airtec, in 1987. Since 1991 this method has been the state of the art in AAD technology.

We are proud to say that we have recorded more than 5,100 lives saved to date.

The Military CYPRES combines two functions in one device:

- Training mode for all jumps at local dropzones, as CYPRES automatically calibrates to ground level (QFE) and monitors the parachuting activity.
- Operational mode for all jumps to a remote landing area, as the device can easily be set to the landing elevation using absolute air pressure (mbar/In.Hg) wherever you are, during flight, in a pressurized cabin or prior to boarding.

Military CYPRES 2 1000/35 A

This model is designed for versatile military use and is recommended for solo jumps carrying very light equipment or no equipment. The activation setting reflects the short opening distance of smaller tactical square parachutes.

This system can also be used on the bundle for MTTB jumps.

Contact the manufacturer of your parachute/container system for further assistance.

Activation altitude: approx. 1000 ft.
Activation speed: approx. 35 m/s

For 1-Pin Container:	Part no: 3431322	NSN: 1670-12-361-9578	GTIN: 4260375530700
For 2-Pin Container:	Part no: 3432322	NSN: 1670-12-361-9579	GTIN: 4260375530717

Specifications

Activation altitude	approx. 1000 ft
Activation speed	approx. 35 m/s (78 mph)
Dimension of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32 mm)
Cable length of the control unit	approx. 47 1/3 inch (1200 mm)
Cable length of the release unit	approx. 20 inch (500 mm)
Volume	9,15 cubic inch (150 cm³)
Weight	8,18 ounces (232 grams)
Working temperature	+145° F to -25° F * (+ 63° to - 32° centigrade)
Maximum allowable humidity	up to 99,9 % rel. humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Target DZ elevation range	200 to 1094 hPa (approx. - 2140 to + 38633 feet MSL)
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15,5 years from date of manufacture

The Military CYPRES combines two functions in one device:

- Training mode for all jumps at local dropzones, as CYPRES automatically calibrates to ground level (QFE) and monitors the parachuting activity.

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Military CYPRES 2 1500/35 A

This CYPRES has been developed for use in various applications using tactical canopies and higher loads. It is recommended for multi-mission solo jumps with or without drogue deployment systems.

The increased activation altitude of 1,500 ft. is appropriate to allow for the larger opening distance of most tactical canopies used in the field.

Can also be used on the bundle for MTTB jumps.

Contact the manufacturer of your parachute/container system for further assistance.

Activation altitude: approx. 1500 ft.
Activation speed: approx. 35 m/s

For 1-Pin Container:	Part no: 3431323	NSN: 1670-12-361-9580	GTIN: 4260375530724
For 2-Pin Container:	Part no: 3432323	NSN: 1670-12-361-9581	GTIN: 4260375530731

Specifications

Activation altitude	approx. 1500 ft
Activation speed	approx. 35 m/s (78 mph)
Dimension of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32 mm)
Cable length of the control unit	approx. 47 1/3 inch (1200 mm)
Cable length of the release unit	approx. 20 inch (500 mm)
Volume	9,15 cubic inch (150 cm³)
Weight	8,18 ounces (232 grams)
Working temperature	+145° F to -25° F * (+ 63° to - 32° centigrade)
Maximum allowable humidity	up to 99,9 % rel. humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Target DZ elevation range	200 to 1094 hPa (approx. - 2140 to + 38633 feet MSL)
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15,5 years from date of manufacture

The Military CYPRES combines two functions in one device:

- Training mode for all jumps at local dropzones, as CYPRES automatically calibrates to ground level (QFE) and monitors the parachuting activity.

- Operational mode for all jumps to a remote landing area, as the device can easily be set to the landing elevation using absolute air pressure (mbar/In.Hg) wherever you are, during flight, in a pressurized cabin or prior to boarding.

Military CYPRES 2 1900/35 A

This CYPRES has been specifically designed for the needs of “slick” (no combat equipment) military tandem and multi-mission solo operations or with heavy loads. To allow for the higher altitude for tandem canopy deployment in conjunction with the considerable deployment distance of tandem reserve canopies, this device is set to an activation altitude of 1,900 ft.

Do not use for solo jumps with tandem equipment that includes a large drogue system.

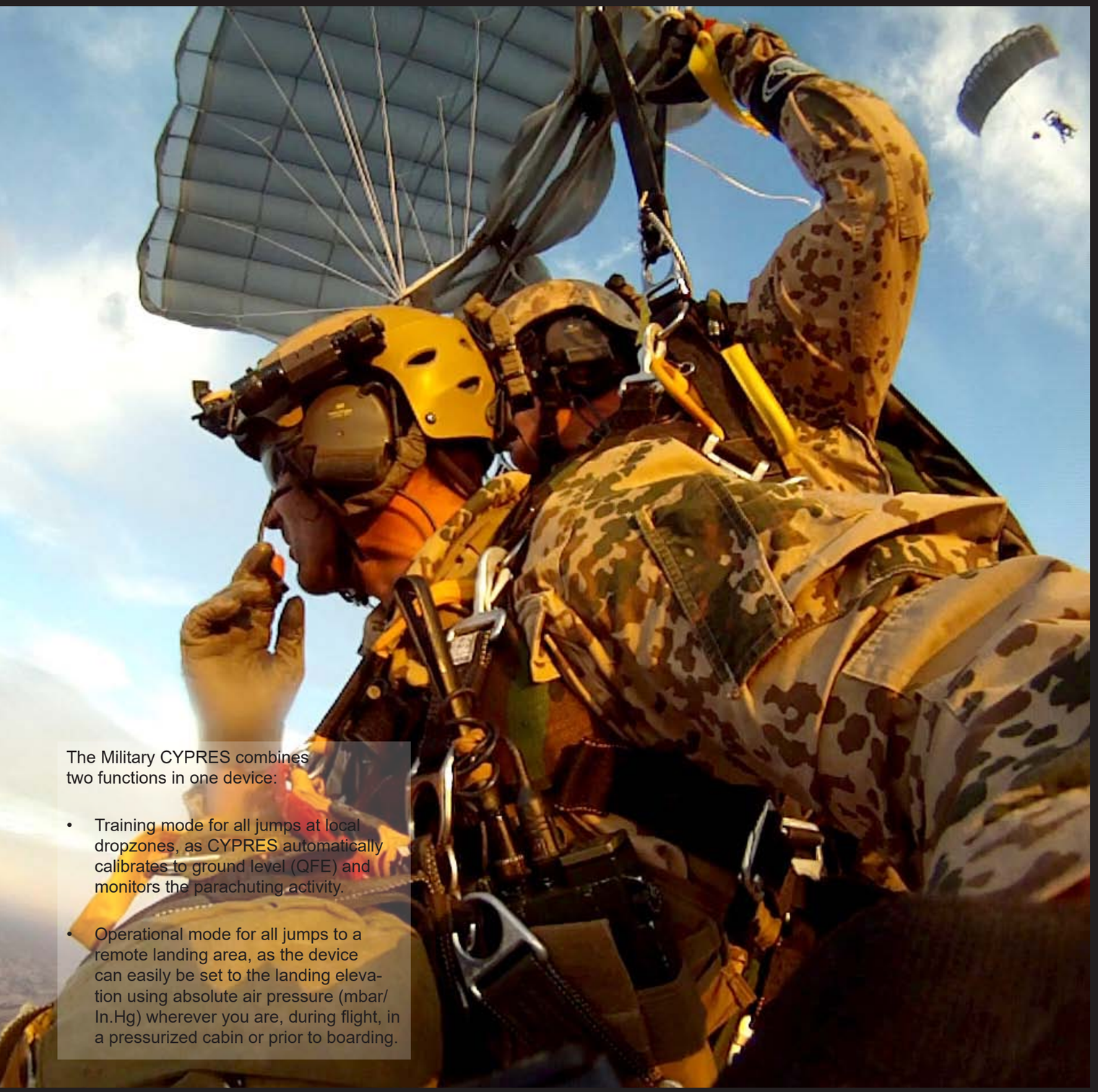
Contact the manufacturer of your parachute/container system for further assistance.

Activation altitude: approx. 1900 ft.
Activation speed: approx. 35 m/s

For 1-Pin Container:	Part no: 3631304	NSN: 1670-12-361-9582	GTIN: 4260375530748
For 2-Pin Container:	Part no: 3632304	NSN: 1670-12-361-9583	GTIN: 4260375530755

Specifications

Activation altitude	approx. 1900 ft
Activation speed	approx. 35 m/s (78 mph)
Dimension of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32 mm)
Cable length of the control unit	approx. 47 1/3 inch (1200 mm)
Cable length of the release unit	approx. 20 inch (500 mm)
Volume	9,15 cubic inch (150 cm³)
Weight	8,18 ounces (232 grams)
Working temperature	+145° F to -25° F * (+ 63° to - 32° centigrade)
Maximum allowable humidity	up to 99,9 % rel. humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Target DZ elevation range	200 to 1094 hPa (approx. - 2140 to + 38633 feet MSL)
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15,5 years from date of manufacture



The Military CYPRES combines two functions in one device:

- Training mode for all jumps at local dropzones, as CYPRES automatically calibrates to ground level (QFE) and monitors the parachuting activity.
- Operational mode for all jumps to a remote landing area, as the device can easily be set to the landing elevation using absolute air pressure (mbar/ In.Hg) wherever you are, during flight, in a pressurized cabin or prior to boarding.

Military CYPRES 2 2500/35 A

The 2500 model is also available with an increased activation speed of 35 m/s (78 mph).

This CYPRES is made for operations where a higher activation altitude and 35 m/s (78 mph) is preferred.

Do not use for solo jumps with tandem equipment and MTTB (bundles) including a large drogue system.

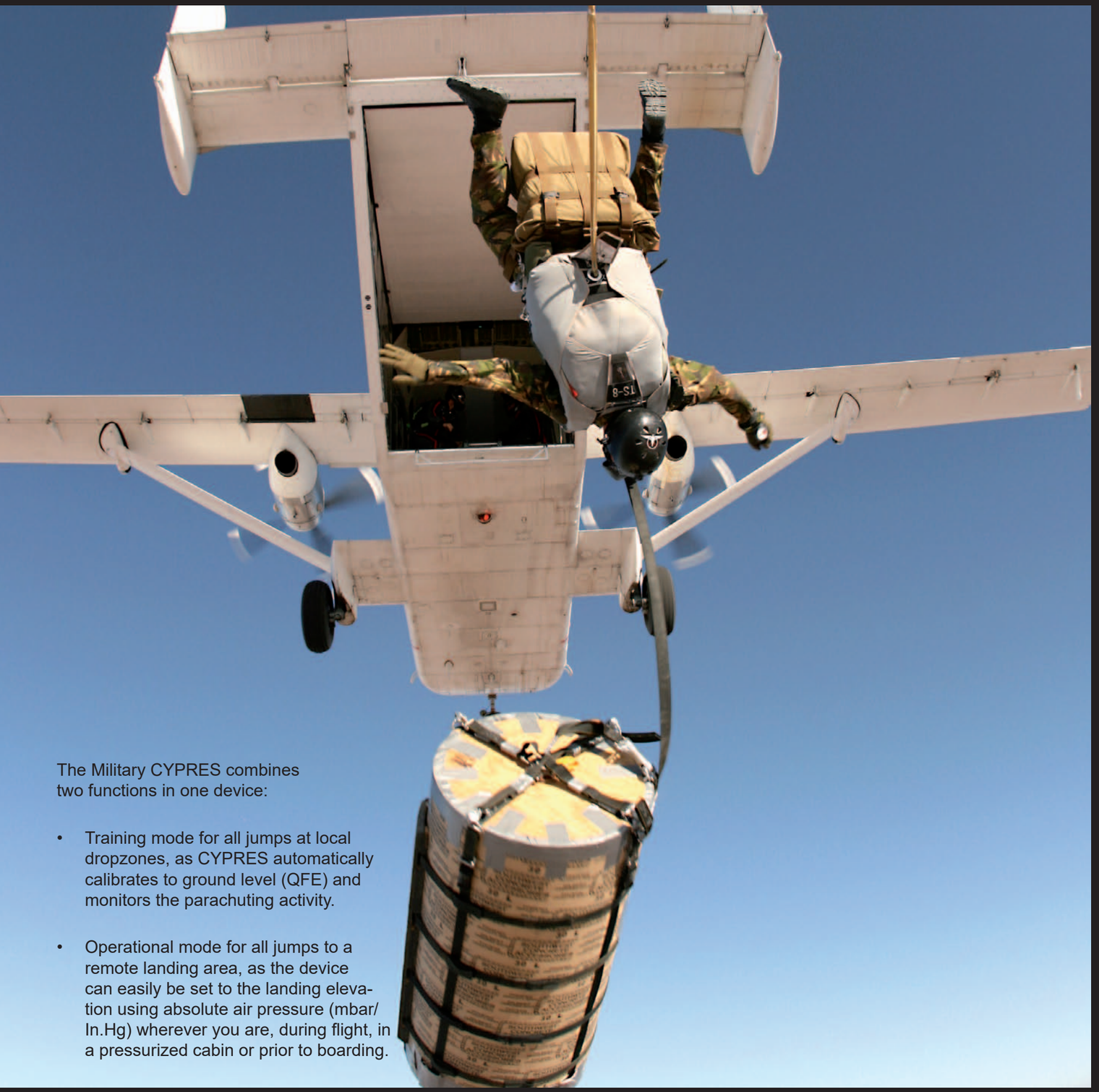
Contact the manufacturer of your parachute/container system for further assistance.

Activation altitude: approx. 2500 ft.
Activation speed: approx. 35 m/s

For 1-Pin Container:	Part no: 3631308	NSN:	GTIN: 4260375533503
For 2-Pin Container:	Part no: 3632308	NSN:	GTIN: 4260375533510

Specifications

Activation altitude	approx. 2500 ft
Activation speed	approx. 35 m/s (78 mph)
Dimension of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32 mm)
Cable length of the control unit	approx. 47 1/3 inch (1200 mm)
Cable length of the release unit	approx. 20 inch (500 mm)
Volume	9,15 cubic inch (150 cm³)
Weight	8,18 ounces (232 grams)
Working temperature	+145° F to -25° F * (+ 63° to - 32° centigrade)
Maximum allowable humidity	up to 99,9 % rel. humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Target DZ elevation range	200 to 1094 hPa (approx. - 2140 to + 38633 feet MSL)
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15,5 years from date of manufacture



The Military CYPRES combines two functions in one device:

- Training mode for all jumps at local dropzones, as CYPRES automatically calibrates to ground level (QFE) and monitors the parachuting activity.
- Operational mode for all jumps to a remote landing area, as the device can easily be set to the landing elevation using absolute air pressure (mbar/ In.Hg) wherever you are, during flight, in a pressurized cabin or prior to boarding.

Military CYPRES 2 2500/29 A

This CYPRES is recommended for “heavy” (two jumpers with full combat equipment) tandem and MTTB (bundle) operations. The activation altitude of 2,500 ft. allows for the deployment of large parachutes and heavy loads. The activation speed of 29 m/s is adjusted to the slower fall rate under a large drogue after the bundle load has been cut away.

For the bundle delivery parachute we recommend a vertical separation of a minimum of 1,000 ft. We recommending combining this with the 1500/35A or 1000/35A model.

Contact the manufacturer of your parachute/container system for further assistance.

Activation altitude: approx. 2500 ft.
Activation speed: approx. 29 m/s

For 1-Pin Container:	Part no: 3631307	NSN: 1670-12-361-9584	GTIN: 4260375530762
For 2-Pin Container:	Part no: 3632307	NSN: 1670-12-361-9585	GTIN: 4260375530779

Specifications

Activation altitude	approx. 2500 ft
Activation speed	approx. 29 m/s (65 mph)
Dimension of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32 mm)
Cable length of the control unit	approx. 47 1/3 inch (1200 mm)
Cable length of the release unit	approx. 20 inch (500 mm)
Volume	9,15 cubic inch (150 cm³)
Weight	8,18 ounces (232 grams)
Working temperature	+145° F to -25° F * (+ 63° to - 32° centigrade)
Maximum allowable humidity	up to 99,9 % rel. humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Target DZ elevation range	200 to 1094 hPa (approx. - 2140 to + 38633 feet MSL)
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15,5 years from date of manufacture

The Military CYPRES combines two functions in one device:

- Training mode for all jumps at local dropzones, as CYPRES automatically calibrates to ground level (QFE) and monitors the parachuting activity.

- Operational mode for all jumps to a remote landing area, as the device can easily be set to the landing elevation using absolute air pressure (mbar/In.Hg) wherever you are, during flight, in a pressurized cabin or prior to boarding.

Changeable MODE Military CYPRES 2

The Changeable Mode MILITARY CYPRES 2 is the next step in our AAD technology and combines CYPRES' tried and trusted "Reliability made in Germany" with the desire for greater flexibility in military applications.

Features

- **flexible mode change in the field**
- **safe setting procedure**
- **prevention of unwanted mode change**

The user can independently switch between the various modes (1000/35 - 1500/35 - 1900/35 - 2500/35). A complex sequence of operations for the mode change helps to prevent an unintentional setting. All handling is identical to all other military CYPRES systems.

Each particular mode is behaves identically to the original corresponding military model.

For 1-Pin Container:	Part no: 3401000	NSN:	GTIN: 4260375533442
For 2-Pin Container:	Part no: 3402000	NSN:	GTIN: 4260375533459

Specifications

Activation altitude	according to set mode
Activation speed	according to set mode
Dimension of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32 mm)
Cable length of the control unit	approx. 47 1/3 inch (1200 mm)
Cable length of the release unit	approx. 20 inch (500 mm)
Volume	9,15 cubic inch (150 cm³)
Weight	8,18 ounces (232 grams)
Working temperature	+145° F to -25° F * (+ 63° to - 32° centigrade)
Maximum allowable humidity	up to 99,9 % rel. humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Target DZ elevation range	200 to 1094 hPa (approx. - 2140 to + 38633 feet MSL)
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15,5 years from date of manufacture

Options

BDZ - Below Drop Zone

A civilian CYPRES ceases all actions at ground level. All functions are ceased below this level.
An optional feature will make the Military CYPRES behave differently in operational mode:
When a jumper descends below the target DZ (for example, if the target DZ is on a mountain and he descends along the mountain towards a valley), then this optional feature will allow the unit to remain active even below the original programmed target DZ. If the vertical speed exceeds the activation speed during such a mission, then the Military CYPRES in operational mode will cut the reserve closing loop. This feature is included with new units to order only and is indicated by the ⇩ sign on the left of the control unit.

1500 / 35 A with BDZ option

1000 / 35 A
For 1-Pin Container: Part no: 3651051 NSN: n.a. GTIN: 4260375533565
For 2-Pin Container: Part no: 3651052 NSN: n.a. GTIN: 4260375533626

1500 / 35 A
For 1-Pin Container: Part no: 3431327 NSN: 1670-12-361-9582 GTIN: 4260375533466
For 2-Pin Container: Part no: 3432327 NSN: n.a. GTIn: 4260375533473

1900 / 35 A
For 1-Pin Container: Part no: 3653051 NSN: n.a. GTIN: 4260375533671
For 2-Pin Container: Part no: 3653052 NSN: n.a. GTIn: 4260375533688

2500 / 35 A
For 1-Pin Container: Part no: 3651308 NSN: n.a. GTIN: 4260375533848
For 2-Pin Container: Part no: 3652308 NSN: n.a. GTIn: 4260375533855

2500 / 29 A
For 1-Pin Container: Part no: 3654051 NSN: n.a. GTIN: 4260375533718
For 2-Pin Container: Part no: 3654052 NSN: n.a. GTIn: 4260375533725

changeable MODE MILITARY
For 1-Pin Container: Part no: 3451000 NSN: n.a. GTIN: 4260375533862
For 2-Pin Container: Part no: 3452000 NSN: n.a. GTIn: 4260375533879

The Enhanced Connectivity CYPRES (EC CYPRES)
is the next-generation Military CYPRES

NEXT GENERATION

Task: Use in darkened aircraft

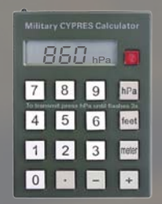
Solution: Illuminated Display

Task: Perfect setting

Solution:

Both **manuallly** *and* **wirelessly** by the JM

- At any time on the ground
- At any time in the aircraft
- Even in an actively pressurized cabin
- Illuminated keys and display



Enhanced Connectivity CYPRES

The EC CYPRES is the next-generation Military CYPRES. It provides all the benefits of the Military CYPRES 2 as well as the following additional new features:

- Illuminated display
- Wireless remote setting and re-setting
  (using the Military CYPRES Calculator with remote functionality)
- Wireless data download (using the CYPRES Datacollector)
- Changeable activation modes
- Operational and training mode
- ... And much more

The wireless capabilities allow for flexible use during the mission and for post-processing.

EC CYPRES

For 1-Pin Container:	Part no: 3451001	GTIN: 4260375530038
For 2-Pin Container:	Part no: 3452001	GTIN: 4260375530045

Task: Universal usage

Solution:
2 Units in 1 Device:
Training and Operational Mode

Task: Quickly repair damage

Solution: Field-replaceable Control Unit

Task: Reusable after activation

Solution: Field-replaceable Cutter

Task: No battery trouble

Solution:
Never replace battery
for 99% + of all CYPRES

Task: Continuous usage

Solution:
Maintenance Voluntary

The Enhanced Connectivity CYPRES (EC CYPRES) is the next-generation Military CYPRES

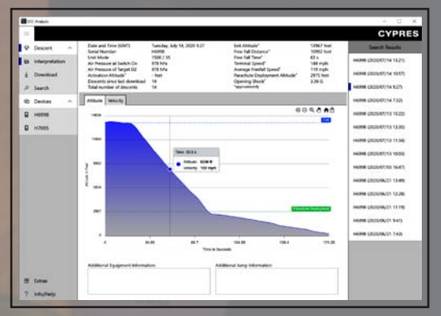
Programmable Military CYPRES Calculator (one included for every five EC CYPRES)

In.Hg / ft. (imperial system) — Part no: 980101
NSN: 1670-12-395-6480 — GTIN: 4260375531769

hPa / m / ft. (metric system) — Part no: 980001
NSN: 1670-12-395-5063 — GTIN: 4260375531776

Enhanced Connectivity CYPRES

Task: Data recall



Datacollector
Part no: 4550000
GTIN: 4260375533190

Solution:
Wireless Download

- Retrieve all information immediately
- No need to remove unit / control unit

Specifications EC CYPRES unit

Activation altitude	according to set MODE (1000 / 1500 / 1900 / 2500 feet)
Activation speed	approx. 35 m/s (78 mph)
Length, width, height of the processing unit	approx. 3.35 x 1.69 x 1.26 inches (85 x 43 x 32 mm)
Length, width, height of the control unit	approx. 2.6 x 0.86 x 0.27 inches (66 x 22 x 7 mm)
Length, diameter of the release unit	approx. 2.44 x 0.31 inches (43 x 8 mm)
Cable length of the control unit	approx. 47.24 inches (1 200 mm)
Cable length of the release unit	approx. 19.69 inches (500 mm)
Volume	approx. 9.15 cubic inches (150 cm³)
Weight	approx. 5.59 ounces (174 grams)
Weight of the release unit (1-pin)	approx. 0.85 ounces (24 grams)
Storage temperature	+160° F to -58° F (+ 71° to - 50°C)
Storage pressure	200 to 1,094 hPa (approx. - 2,140 to + 38,633 feet MSL)
Working temperature	+145° F to -25° F * (+ 63° to - 32°C *)
Maximum allowable humidity	up to 99.9 % rel. humidity
IP68	waterproof up to 15 minutes down to a depth of 15 feet (up to 24 hours down to a depth of 8 feet)
Target DZ elevation range	200 to 1,094 hPa (approx. - 2,140 to + 38,633 feet MSL)
Operating range below / above sea level	-2,140 feet to +65,000 feet (-650 m to +20,000 m)
Functioning period	14 hours
Power supply	service life warranty**
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15.5 years from date of manufacture

Aircrew CYPRES 2

This CYPRES is designed to assist aircrew in emergency situations where they have been forced to bail out of an aircraft or where they have unintentionally fallen from an aircraft (working at open tailgates, etc.).

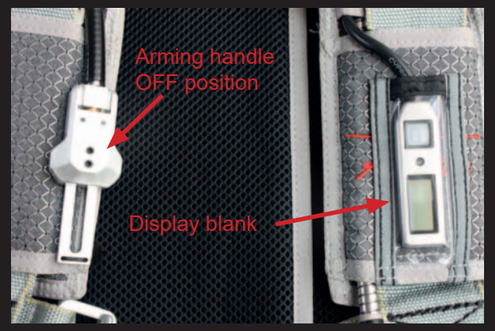
The standard Aircrew CYPRES 2 version can be delivered with 2 different arming methods:

1. Automatic arming by static line:
For pilots or aircrew who are permanently seated. The static line will automatically arm the unit by pulling the arming cable in the event of an emergency bail-out.
During normal flight the unit is disarmed. It will not interfere with any conceivable flight scenarios or cabin pressure situations.

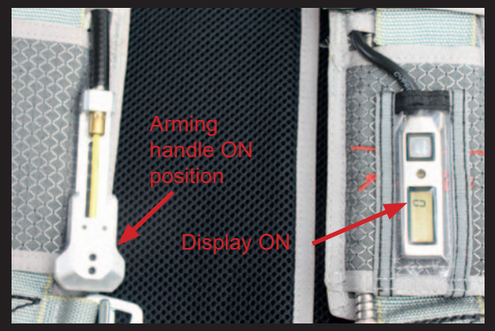
2. Manual arming by slide bar:
The aircrew member arms the device manually right before working at the aircraft door or open tailgate etc. The device can be disarmed any time by pushing the handle back into the OFF position.

Aircrew CYPRES 2:			
For 1-Pin Container:	Part no: 3501001	NSN: 1670-12-362-0406	GTIN: 4260375530434
For 2-Pin Container:	Part no: 3502001	NSN: 1670-12-385-6949	GTIN: 4260375530441
For 3-Pin Container:	Part no: 3503001	NSN: 1670-12-375-0252	GTIN: 4260375530465
Static Line:	Part no: 972013	NSN: n.n.	GTIN: 4260375533183
Slide Bar:	Part no: 972030	NSN: n.n.	GTIN: 4260375533664

Slide Bar Unit OFF



Slide Bar Unit ON



Static Line

Specifications

Activation altitude	approx. 13000 feet (approx. 4000 meter) and below
Activation speed	approx. 35 m/s (6900 feet/min)
Dimension of the processing unit	3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32mm)
Cable length of control unit	can vary, standard approx. 39 1/3 inch (1000 mm)
Cable length of the release unit	20 inch (500 mm)
Volume (without housing)	standard approx. 144 cm^3
Weight (without housing)	standard approx. 9,17 ounces (260 grams)
Working temperature	+63° to -32° Celsius
Maximum allowable humidity	up to 98 % rel. humidity
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Minimum operating altitude	200 m / + deployment distance of parachute in use
Voluntary maintenance cycle	5 and 10 years from date of manufacture
Total Service Life	15,5 years from date of manufacture

SLS CYPRES 2

The CYPRES 2 Static Line System (SLS) is designed to initiate the reserve parachute activation of low-level round canopy static line jumpers who find themselves in an emergency situation. If the main parachute does not slow down the jumper to a vertical speed of less than 13 meters per second approx. 500 to 600 feet below the aircraft, the CYPRES SLS is designed to initiate the deployment of the reserve parachute.

The CYPRES 2 Static Line System is a combination of:
1 CYPRES 2 SLS Aircraft Module
1 CYPRES 2 SLS Self-Test Module
and multiple CYPRES 2 SLS units

SLS Aircraft Module - boxed

Self-Test Module

SLS unit - 2-pin version

SLS CYPRES 2 Self-Test Module

This is mainly a device for the person responsible for rigging & storage. It allows them to check all of their CYPRES SLS units whenever they want by triggering the units to execute a self-test.

Just one click on the push button will cause all of their units to execute a self-test. Every unit will count down the typical 10 CYPRES self-test digits by blinking white 10 times.

After the self-test has been completed, each SLS unit will blink white at 5-second intervals, indicating the successful self-test. The SLS CYPRES will blink white at 5-second intervals for the typical CYPRES period of 14 hours. It will then revert to the white-blinking interval of 2 minutes.

If the SLS unit detects a problem, at the end of the self-test it will permanently illuminate the red LED for 3 minutes and then blink red instead of white. The red blinking can only be eliminated by repair or, if the reason for the red blinking is resolved, by the next self-test.

The self-test procedure can be repeated as often as you want.

In practice: The store manager can trigger a self-test of the CYPRES SLS units early in the morning of a jumping day, before the parachute systems are drawn from storage. All reserves that blink white are good to issue to jumpers. If an SLS unit blinks red, it must not be issued and must be checked instead.

Self-Test Module
Part no: 4520000
NSN: 1670-12-394-3791
GTIN: 4260375532094

SLS unit mounted in chest reserve

SLS CYPRES 2 unit

Specifications SLS unit

Activation altitude	approx. 500 ft to 600 ft below jump aircraft
Activation speed	approx. > 13 m/s / 29 mph
Dimension of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32 mm)
Cable length of the display unit	approx. 25 inch (635 mm)
Cable length of the release unit	approx. 20 inch (500 mm)
Volume	approx. 8,9 cubic inch (146 cm³)
Weight	approx. 4,66 ounces (165 grams)
Working temperature	+145° F to -25° F * (+ 63° to - 32° centigrade)
Waterproof	up to 24 hours down to a depth of 8 feet
Maximum allowable humidity	up to 99,9 % rel. humidity
Operating range below / above sea level	-2140 feet to +65500 feet (-650 m to +20000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture +/- 6 months
Total Service Life	15,5 years from date of manufacture

CYPRES 2 SLS unit
For 1-pin Chest Reserve Container:

Part no: 4511000
NSN: 1670-12-394-3784
GTIN: 4260375530809

For 2-pin Chest Reserve Container:
Part no: 4512000
NSN: 1670-12-394-3789
GTIN: 4260375530816

SLS CYPRES 2 Aircraft Module

The jumpmaster must switch on the CYPRES SLS Aircraft Module which is at a defined location inside the jump aircraft at least one minute before dropping.

After the CYPRES SLS unit establishes wireless contact with the switched-on CYPRES SLS Aircraft Module, it goes into ‘working mode’. To demonstrate this, the SLS unit blinks white every two seconds. If it encounters a problem of any kind it will blink red every two seconds.

Features:
on / off.....a switch on the cable connected control unit
suitability.....for all types of jump aircraft
transportable .....in a camouflage nylon container

working frequency .....433 MHz
output ..... 1 Milliwatt (0 dBm)
weight..... approx, 7 lbs (3,5 kg)

Part no: 4530000 NSN: 1670-12-394-3793 GTIN: 4260375532087

SLS Aircraft Module - unpacked, front

SLS Aircraft Module - unpacked, back

SLS Aircraft Module - packed

Expert CYPRES 2

This CYPRES is designed for all sport disciplines in parachuting. This proven model is the right unit for military display teams, competition teams jumping accuracy, formation and style or those using sport parachute equipment. The activation altitude of 750 ft. and the activation speed of 35 m/sec. are customized to the needs of modern sport skydivers. Using single-action simplicity (switch-on), the system runs a self-test, calibrates to drop zone ground level and monitors parachuting activities for the next 14 hours. CYPRES features an automatic shut-off after a 14-hour working period. Due to its lower operating range and operating temperature this model is not recommended for HAHO or HALO missions.

feet version:

For 1-Pin Container:	Part no: 3121000	NSN: 1670-12-335-6635	GTIN: 4260375530618
For 2-Pin Container:	Part no: 3122000	NSN: 1670-12-338-5758	GTIN: 4260375530625

meter version:

For 1-Pin Container:	Part no: 3111000	NSN: 1670-12-337-0018	GTIN: 4260375530632
For 2-Pin Container:	Part no: 3112000	NSN: 1670-12-337-0019	GTIn: 4260375530649

Specifications

Activation Altitude:	approx. 750 ft
Activation Speed	approx. 35 m/s / 78 mph
Dimensions of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32mm)
Cable length of control unit	approx. 25 1/2 inch (650mm)
Cable length of release unit	approx. 20 inch (500mm)
Volume	9,15 cubic inch (150cm³)
Weight	6,98 ounces (198 grams)
Working Temperature	+ 63°C to -25°C
Maximum allowable humidity	Up to 99,9 % rel. Humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Altitude adjustment range	+/- 3000 ft (1000 m)
Operating range below / above sea level	-2140 feet to +26000 feet (-650 m to +8000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture
Total Service Life	15,5 years from date of manufacture

Student CYPRES 2

The Student CYPRES is suitable for student training. The lower activation speed of 13 m/sec and the activation altitude of 1,000 ft. handles student emergency situations such as line overs, partial canopy inflation and spinning malfunctions under an open canopy, as well as other freefall scenarios that may occur. These proven activation parameters provide parachuting training schools with the confidence they need that their students will enjoy an enhanced level of safety.
With the simplicity of just one single action (switch-on), the system runs a self-test, calibrates to drop zone ground level and monitors skydiving activities for the next 14 hours. CYPRES features an automatic shut-off after a 14-hour working period. The Student CYPRES 2 model is waterproof down to 8 ft. for a period of up to 24 hours.

feet version:

For 1-Pin Container:	Part no: 3221100	NSN: 1670-12-335-6735	GTIN: 4260375530823
For 2-Pin Container:	Part no: 3222100	NSN: 1670-12-361-6805	GTIN: 4260375530830

meter version:

For 1-Pin Container:	Part no: 3211100	NSN: 1670-12-357-7369	GTIN: 4260375530861
For 2-Pin Container:	Part no: 3212100	NSN: 1670-12-337-0020	GTIN: 4260375530878

Specifications

Activation Altitude:	approx. 1000 ft
Activation Speed	approx. 13 m/s / 29 mph
Dimensions of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32mm)
Cable length of control unit	approx. 39 1/3 inch (1000mm)
Cable length of release unit	approx. 20 inch (500mm)
Volume	9,15 cubic inch (150cm³)
Weight	7,54 ounces (214 grams)
Working Temperature	+ 63°C to -25°C
Maximum allowable humidity	Up to 99,9 % rel. Humidity
Waterproof	up to 24 hours down to a depth of 8 feet
Altitude adjustment range	+/- 3000 ft (1000 m)
Operating range below / above sea level	-2140 feet to +26000 feet (-650 m to +8000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture
Total Service Life	15,5 years from date of manufacture

Changeable MODE CYPRES 2

The Changeable MODE CYPRES 2 is the next step in our AAD technology and combines CYPRES's tried and trusted "Reliability made in Germany" with the desire for more flexible applications.

Features

- **flexible mode change in the field**
- **safe setting procedure**
- **unwanted mode change prevented**

The user can independently switch between the different modes (Expert - Student - Tandem - Speed). A complex sequence of operations for the mode change helps to prevent an unintentional setting. All handling is identical to all other civilian CYPRES systems.

Each particular mode behaves identically to the original corresponding civilian model.

The default delivery setting for Changeable MODE units is type Expert, scale Feet.

For 1-Pin Container:	Part no: 3001000	NSN: 1670-12-400-0524	GTIN: 4260375530519
For 2-Pin Container:	Part no: 3002000	NSN: n.n.	GTIN: 4260375530526

Specifications

Activation Altitude:	according to set MODE
Activation Speed	according to set MODE
Dimensions of the processing unit	approx. 3 1/3 x 2 2/3 x 1 1/4 inch (85 x 43 x 32mm)
Cable length of control unit	approx. 39 1/3 inch (1000mm)
Cable length of release unit	approx. 20 inch (500mm)
Volume	9,15 cubic inch (150cm³)
Weight	6,98 ounces (198 grams)
Working Temperature	+ 63°C to -25°C
Maximum allowable humidity	Up to 99,9 % rel. Humidity
Waterproof	up to 24 hours down to a depth of 8 feet (2,5m)
Altitude adjustment range	+/- 3000 ft (1000 m)
Operating range below / above sea level	-2140 feet to +26000 feet (-650 m to +8000 m)
Voluntary maintenance cycle	5 and 10 years from date of manufacture
Total Service Life	15,5 years from date of manufacture

Military CYPRES 2 Technology

TARGET SETTING
quick, easy, unlimited range

For tactical applications in remote areas, the Military CYPRES activation altitude can be easily preset on ground, in flight, or even in a pressurized cabin. A CYPRES calculator is available to help you to convert and acquire pressure values. This is a useful tool and is supplied free of charge.

NO BATTERY CHANGE
permanent work capability

CYPRES operates with a maintenance-free power supply – there is no need for user record-keeping, stocking batteries, or battery replacement. No technical maintenance personnel are required from the user end.

WATERPROOF
no drop out during mission

CYPRES is a waterproof device down to a depth of 8 feet for a period of up to 24 hours. It simply requires an air filter replacement after coming in contact with water.

2 in 1 2 UNITS 1 DEVICE
training and operational mode

There are 2 modes to choose from for all military operational requirements and tactical applications.

Military CYPRES 2 Technology

FACTORY MAINTENANCE
unique service system

At the factory, various tests will check the CYPRES system from top to bottom. Linearity, calibration, hardware inspection and applicable hard- and software updates will be performed. The voluntary maintenance date is accessible from the external display. CYPRES automatically reminds users of their next voluntary maintenance. US- and EUROPE-based service facilities ensure low costs and minimum downtime. No technical maintenance personel are required from the user end.

PERFECT DESIGN
very easy to use

CYPRES utilizes a small, rugged case, is lightweight and offers a simple 1-button user interface. CYPRES is a simple device to use. There is no need for the user to interact with the device to switch it off, make weather adjustments, or set the altitude in Training mode. The device shuts off automatically after 14 hours.

THE ORIGINAL
worldwide first choice since 1991

Only the original CYPRES offers outstanding quality, reliability and advanced AAD technology! We invented and patented the CYPRES technology. We have been industry leaders since 1991.

UNIQUE

trouble free

for more than 31 years*

patented

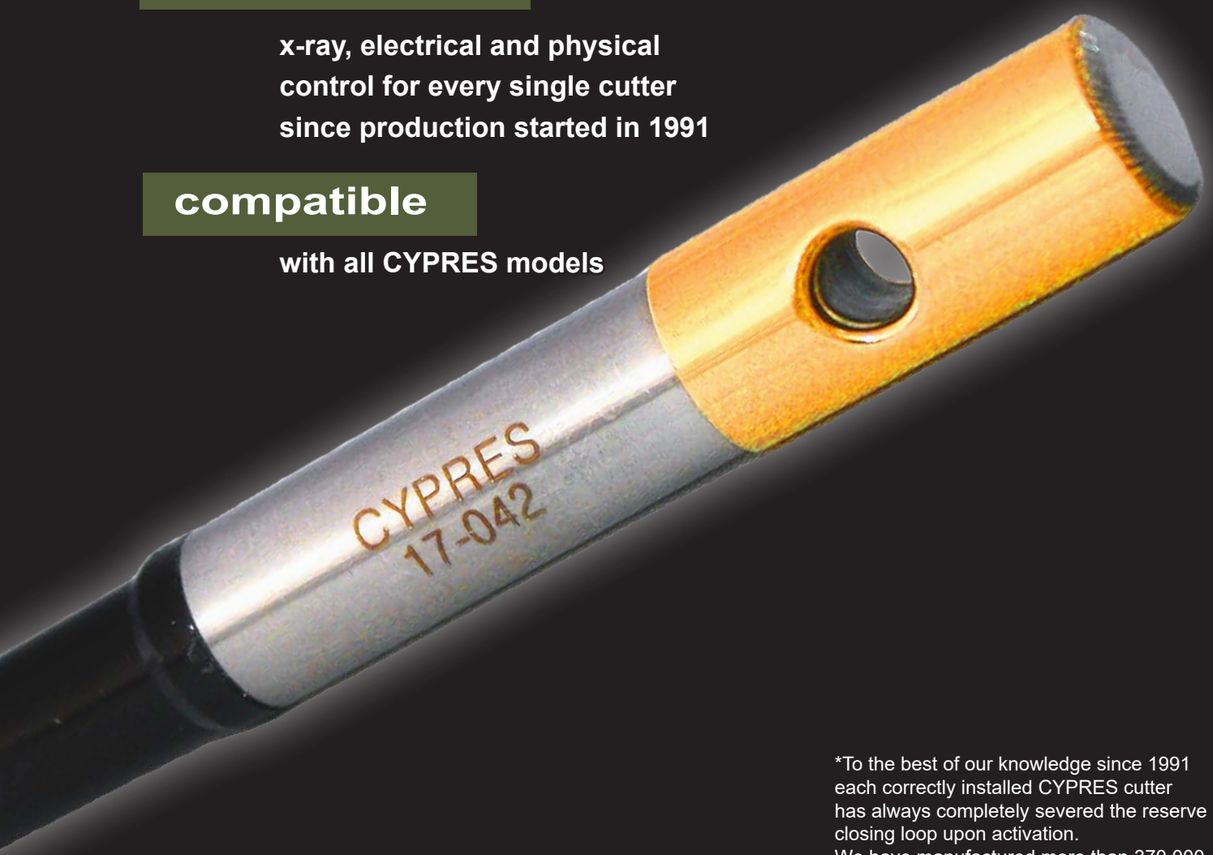
produced for CYPRES only

quality control

x-ray, electrical and physical control for every single cutter since production started in 1991

compatible

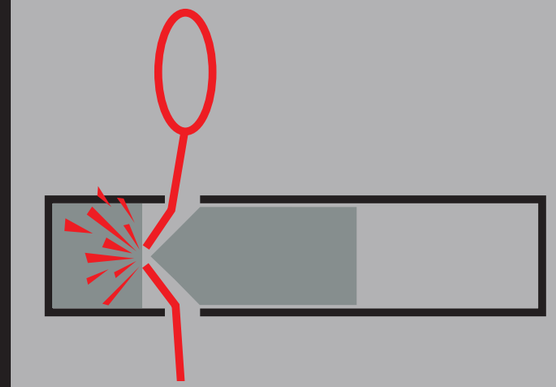
with all CYPRES models

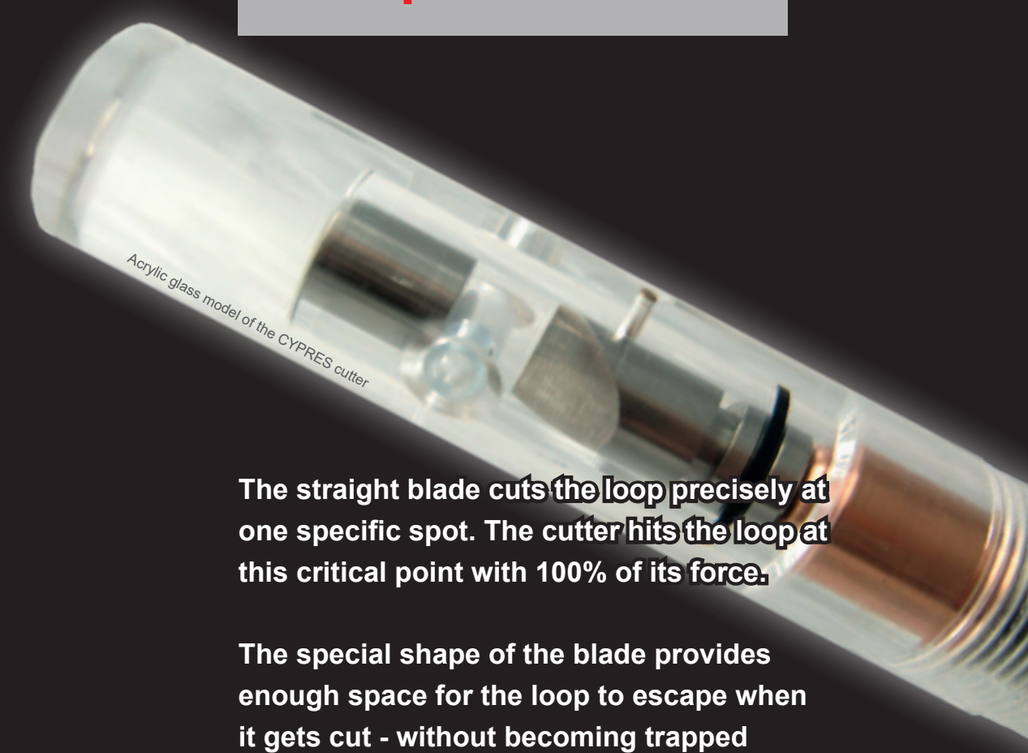


*To the best of our knowledge since 1991 each correctly installed CYPRES cutter has always completely severed the reserve closing loop upon activation.
We have manufactured more than 370,000 CYPRES cutters. They are also used in aerospace.

CYPRES Cutter Technology

CYPRES V-CUT BLADE





The straight blade cuts the loop precisely at one specific spot. The cutter hits the loop at this critical point with 100% of its force.

The special shape of the blade provides enough space for the loop to escape when it gets cut - without becoming trapped - allowing the opening sequence of the reserve container to begin.

Spare Parts

Field replaceable cutter

1-pin Cutter

The EOS (Emergency Opening System) release unit (cutter) can be easily replaced. Just unplug the original unit, plug in the new replacement cutter, and you're ready to go.

Available in 2 versions:

1-pin for containers with one closing pin
Part no: 913100
NSN: 1377-12-364-4230
GTIN : 4260375531516

2-pin for containers with two closing pins
Part no: 913200
NSN: 1377-12-364-4231
GTIN: 4260375531523

If you need to convert a 1-pin type CYPRES into a 2-pin type (or vice versa), simply replace the desired cutter.

2-pin Cutter

Filter for CYPRES 2

The air filter protects the CYPRES from water penetration in the event of a water landing. Its microporous structure ensures clean air flow but blocks water. It only needs to be replaced after water landing.

Part no: 900004
NSN: 1670-12-364-7302
GTIN: 4260375531646

Accessories

Silicone bottle

Part no: 960200
NSN: 6850-12-367-0254
GTIN: 4260375531998

CYPRES washer for loop

Part no: 960100
NSN : 5365-12-335-6636
GTIN: 4260375532018

Temporary pin

(Only needed by packers.)

Part no: 942000
NSN : 8315-12-366-9698
GTIN: 4260375532063

Calculator

Also available as an App in the App stores for Android and for iOS free of charge

In.Hg / ft. (imperial system)
Part no: 980101
NSN: 1670-12-395-6480
GTIN: 4260375531769

hPa / m / ft. (metric system)
Part no: 980001
NSN: 1670-12-395-5063
GTIN: 4260375531776

Packers Kit

Contains: User Guide, Rigging Tips, 5 ea. washers, 1 ea. 50m roll CYPRES loop cord, 2 ea. finger-trapping needles, 1 ea. bottle silicone gel, 1 ea. screwdriver, 1 ea. filter changer, 3 ea. air filter, 1 ea. container with siliconized cloth
Part no: 950000
NSN: 1670-12-375-8275
GTIN: 4260375531950

CYPRES 2 Filter Changer

A stainless steel torque wrench used to change air filters. This procedure is designed to be straightforward and can be completed in about 30 seconds.
Part no: 900005
NSN : 5120-12-364-3798
GTIN : 4260375531653

Loops

1-Pin Part no: 920400
NSN : 1670-12-355-2269
GTIN: 4260375531684

2-Pin Part no: 920500
NSN : 1670-12-406-4628
GTIN: 4260375531691

Loop spools

200m Part no: 920200 NSN : 1670-12-355-2268 GTIN: 4260375531707
50m Part no: 920100 NSN : 1670-12-335-6249 GTIN: 4260375531738

Accessories

Cutter retainer

Part no: 974001
NSN : 1377-12-378-1698
GTIN: 4260375531875

Control unit pouch,

clear window

Part no: 973001
NSN : 1670-12-378-1639
GTIN: 4260375531868

Processing unit pouch

170mm Part no: 971003
NSN : 1670-12-396-1202
GTIN: 4260375532049

190mm Part no: 971002
NSN : 1670-12-383-6586
GTIN : 4260375532056

Silicone cloth

Part no: 12201007
NSN: 6850-12-367-0375
GTIN: 4260375532001

Pull up

Part no: 920601
NSN: 1670-12-358-6078
GTIN: 4260375531974

Soft bodkin

Part no: 920700
NSN : 1670-12-378-1537
GTIN: 4260375532025

Finger trapping needle

Part no: 970000
NSN : 5120-12-377-8896
GTIN: 4260375532032

TRAINING benefit and content:

- CYPRES use and limits
- How to use the Military CYPRES correctly
- CYPRES and rigging
- Casestudies and optimized setup for your organization
- Guarantee and service
- Company profile, history and products
- Research & developement

and more ...

FREE OF CHARGE – Our experts are ready to visit you in your country to deliver all kind of CYPRES AAD training. The training costs will be covered by Airtec GmbH & Co. KG Safety Systems. All we require is a classroom with a projector, a blackboard or white board and some colored pens/ chalk. Your participants can be as many as will fit in the classroom and may include CYPRES users (operators), instructors, riggers, suppliers, and others as required.

Alternatively, we can also arrange a visit to the CYPRES facilities in Bad Wünnenberg, Germany. You can visit Airtec with a military group of up to 10 persons. The topics and schedules of the seminars can be the same, but you will also have the opportunity to take a look at our production and maintenance operations.

CYPRES Mobile Military Training Team

Our team of CYPRES AAD experts, consultants, technicians, rigging professionals and instructors, who have extensive experience in the military and sport parachuting environment, offer training and seminars that will be specially tailored to meet your requirements.

Our team is on stand by to operate around the world.

For further information, to discuss a possible schedule and to arrange a training date please call us or send an email to: military@cypres.aero

AIRTEC – A BY-WORD FOR INVESTMENT, QUALITY AND INNOVATION

Helmut Cloth
founder and CEO of Airtec

Considerable investment in research and development has made AIRTEC the world's technological leader in the area of electronic activation devices. AIRTEC owns more patents in this area than any other AAD manufacturer. This is impressive evidence of AIRTEC's innovative strength since the company's foundation.

"We believe that a lifesaving device should be of the highest possible reliability. The secret to accomplishing this lies in the design of the device, the process by which it is manufactured and the care that is taken of it throughout its life.
We therefore recommend that users allow us to perform a check after 5 years of its life plus/minus 6 months, and then again after 10 years. During this maintenance process we apply everything that we have learned to improve during the previous 5 years. We also take any action that is required due to changes in the parachuting context or in relation to environmental conditions. Both procedures together cost approximately 12% (6% after 5 years and 6% after 10 years) of the unit's purchase price.
What will be shipped back to you is a completely maintained, fully updated CYPRES 2 that has been fitted with every new application that is applicable. It will be quite different to the unit that you sent in.
The incentive for us to invest this effort is not to make a profit (something that you will realize straight away), but rather to further enhance the reliability of our proudcts.
The CYPRES design, the CYPRES production process and CYPRES care & maintenance have reaped fantastic rewards: since the 10th of January 1991 (when we sold the first CYPRES), all CYPRES units that we have ever manufactured and maintained have always - without exception - activated when the appropriate conditions were met and have always completely severed the reserve container closing loop. In doing so, CYPRES devices have saved the lives of more than 5,100 parachutists without ever failing even once. It's a point worth emphasizing: Our devices have never failed."

- Helmut Cloth

1990 -> AIRTEC is founded after years of development. The three founding fathers move into a production hall of 900 sq. ft. and set up the facilities for manufacturing, maintenance, rigging and sales.

1991 -> Delivery of the first CYPRES. The period until the device requires maintenance is two years, twice as long as the industry standard at that time.

1993 -> Production of CYPRES devices grows to 3,500 annually. More hiring brings the staff to ten employees, while the production hall grows to over 5,000 sq. ft. It's maintenance time at AIRTEC for the first devices sold.

1994 -> Production reaches 5,000 devices annually. Maintenance of the early devices proves CYPRES' durable high quality and allows AIRTEC to increase the maintenance interval to four years.

1995 -> Production reaches 6,000 devices annually.

1997 -> Delivery of more than 8,000 CYPRES units annually, worldwide. The workforce grows to a total of 25 AIRTEC employees.

1999 -> AIRTEC's growth continues. The staff has 35 employees and AIRTEC adds a new building to its facilities.

2001 -> AIRTEC remains immune to the worldwide economic upheaval of 2001, with sales numbers remaining at the same level. The company's administration moves into the new building.

2003 -> More than 80,000 CYPRES 1 units are already in use worldwide. AIRTEC introduces a new innovation, the CYPRES 2, and launches it onto the market. It is a huge success. CYPRES 2 almost immediately assumes the same dominant position on the market that the CYPRES 1 enjoyed up to that point.

2005 -> AIRTEC passes the production volume for the CYPRES 1 and now delivers more than 8,000 CYPRES 2 devices annually. The company prepares for more growth and the next phase of its expansion. Sales and rigging move into a new building in order to create more space for production and maintenance for the CYPRES 1 and CYPRES 2 devices.

2007 -> The first CYPRES 2 devices return for maintenance. Once again, the findings surpass all expectations. CYPRES 2 also proves its outstanding quality and reliability.

2009 -> Despite the global economic crisis, sales of CYPRES 2 passes the coveted milestone of 50,000 devices. AIRTEC plans to have a greater presence and engagement in the sport and increases its staff for marketing and customer service to 13 employees.

2011 -> 63,000 CYPRES 2 units are now on the market. Extraordinary events in the AAD market vindicate of our philosophy: Provide customers what they really need - safety and reliability.

2012 -> Airtec responds to the market and takes action to manage the huge demand for CYPRES devices. 4 new employees are hired to strengthen the company's production capacity.

2013 -> Software update with a user-adjustable activation altitude
CYPRES "SLS" moves into the final stage following a 7-year development processA new, 5th CYPRES model is made available: The Changeable Mode CYPRES 2.

2014 -> 90,000th CYPRES 2 unit is produced.

2014 -> Airtec proudly presents the latest revolution in the world of parachuting: The CYPRES Static Line System is launched.

2014 - Dec. -> The 100,000th CYPRES 2 unit is produced.

CYPRES maintenance offers the following elements, as appropriate:

1. All wear and tear is taken care of.
2. We check, recalibrate or replace the following:
   - temperature stability check and adjustment
   - precision of pressure check and adjustment
   - precision of altitude check and adjustment
   - power consumption check and analysis
   - capability to fire
   - functionality of the cutter
   - shielding check and adjustment
   - waterproofness check and adjustment
   - condition of measurement technique and analysis
   - battery
   - filter
3. Any possible and applicable repairs are performed.
4. Any possible and applicable hard- and software updates are performed.
5. Any possible and applicable improvements (discovered in the last 5 years) are implemented.
6. Any modifications due to changed environmental conditions or new developments in parachuting are implemented, as appropriate.

2017 -> Timeframe for voluntary maintenance is increased to 5/10 years.
A new, 6th CYPRES model becomes available: The Wing Suit CYPRES 2 (WSC)

2018 -> New, 5th and 6th Military CYPRES models are launched: The CYPRES 2500/35 A and the Changeable MIL CYPRES

2019 -> The US Air Force chooses the CYPRES LPP model as the AAD for their standard equipment.

2021, January 10th -> CYPRES celebrates its 30th anniversary.

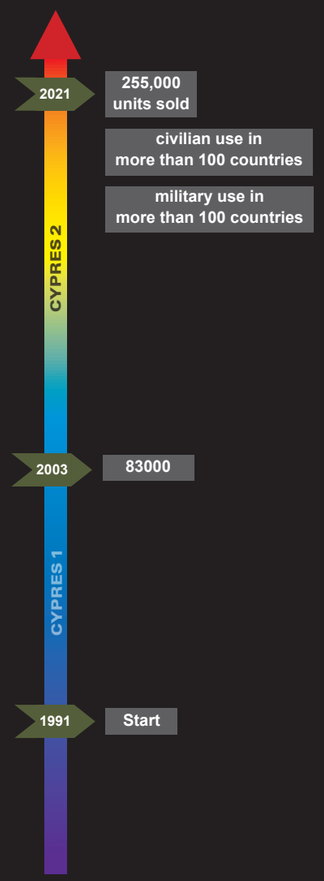
2022 -> Enhanced Connectivity CYPRES launched.

255,000 units

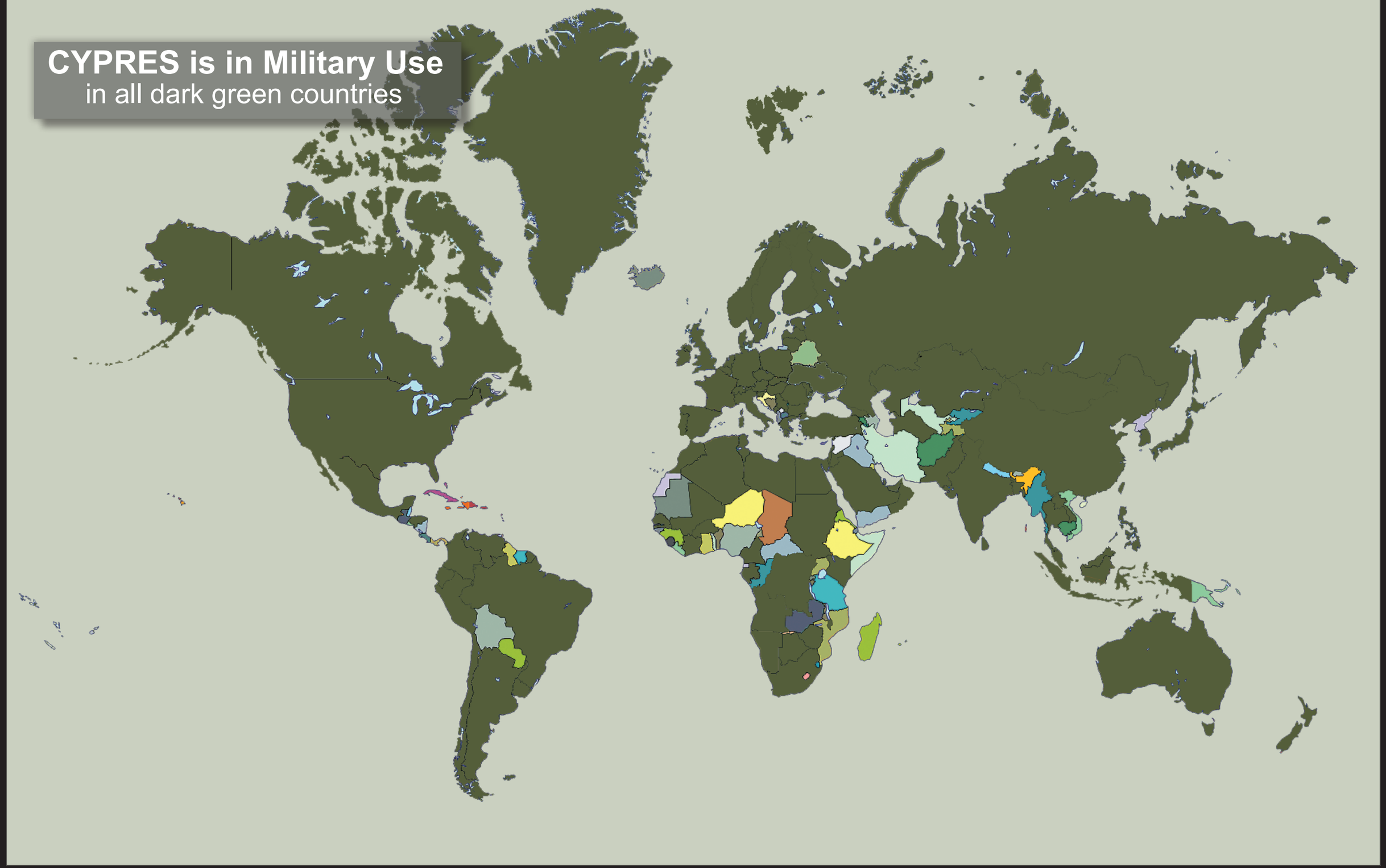
> 161 million jumps

> 5100 lives saved

and CYPRES has never failed to activate and cut through the reserve closing loop when the conditions were met.
(to our current knowledge)



CYPRES is in Military Use
in all dark green countries



Airtec GmbH & Co. KG Safety Systems, Tel: +49-2953-9899-0, Fax: +49-2953-1293, e-mail: military@cypres.aero, https://military.cypres.aero

The task of an Automatic Activation Device is
to initiate a lifesaving deployment sequence for its user,
whenever the conditions for an activation are presented.

We have been manufacturing CYPRES since January 1991.
Our units have accompanied more than 161 million jumps
and have saved more than 5,100 parachutists from impact.

We are proud to report that
all 83,000 CYPRES 1 (manufactured until April 2003)
and all 172,000 CYPRES 2 (manufactured to date)
have always activated and always severed the reserve container closing loop
whenever the conditions for an activation have arisen.

Without exception.
For 31 years.

The reason for this unbelievable reliability is the technical design of the CYPRES,
the way we manufacture it and the fact that we improve it throughout its life.

You will not find such a level of reliability anywhere else.
Either prior to the introduction of CYPRES,
nor during the period that CYPRES has been in operation.

**Please note that all of the above is to the best of our knowledge.*

Should you have any specific requirements, we will have a solution for you.

Please get in touch.

Authorized Military CYPRES Dealer

Many thanks for contributing photos for this catalog:
Carsten Thiel, Paul Floyd, Alexander Spoida, Danny Jacobs, SKA/IMZBw/Sandra Herholt, Thomas Posler

CYPRES 2

Reliability made in Germany

PRECISE

INTELLIGENT

INDEPENDENT

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