funkwerk
security communications

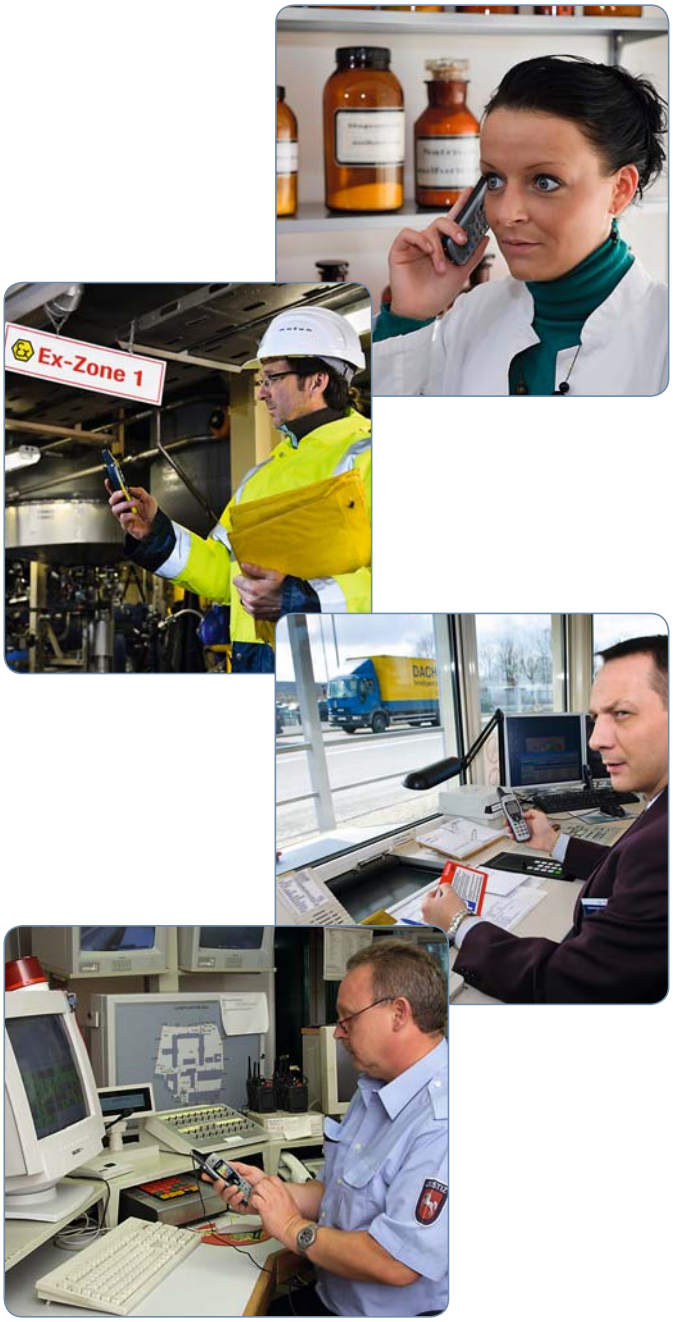
funkwerk FC4: The DECT range of handsets for every situation.

The DECT handset range for the DECT Secury System funkwerk DSS: High-quality, robust, ergonomic.

Security. Everywhere.

Funkwerk Security Communications GmbH has over 40 years of experience in the development of personal security systems and messaging solutions for authorities and industrial applications.

The success of Funkwerk Systems is based on matching our systems precisely to the individual demands of various fields and scenarios; long-term spare parts supply, and intensive and uninterrupted after-sales service provided by a closely-knit network of field representatives and service personnel.



funkwerk FC4: The new DECT handset range.

Innovative technology, high quality, reliability and cost efficiency.

The new DECT terminal units of the funkwerk FC4 range are the result of decades of experience and the technical expertise of Funkwerk Security Communications, as well as the latest developments in the fields of ergonomics, energy management and user prompting.

The funkwerk FC4 series comprises compact and highly robust mobile units for wireless telephony, messaging, as well as offering the possibility of integration into a personal emergency signalling system.

The FC4 handset range includes explosion-proof versions approved to ATEX directives for use in potentially explosive industrial environments.

A further benefit can be found in the short return of investment period due to savings made in both time and costs thanks to the reduction in reaction times and decision processes.

During the development of these units attention was focused on the requirements of users who work alone and requiring a high level of personal security (in accordance with the BGR 139 regulations of the German Employers' Liability Insurance Association) — for example, workers in the oil and petrochemical industry, in prisons and psychiatric facilities.

The durability of the products and the range of useful accessories available ensure a high degree of investment security.

funkwerk FC4: The universal handset range.

The funkwerk FC4 range introduces a new generation of terminal units where particular emphasis is placed on the meaningful display of telephone activities and on making rapid response possible. Incoming calls and entries in the dial, redial and call lists are automatically linked to name entries and displayed accordingly. Indicators signal missed calls and messages.

Important functions such as call-back, phone book access or redial list can be called up by pressing a single button (shortcut).

The high-resolution, illuminated colour display, the newly designed symbol-based user interface and the similarly illuminated keypad with coloured menu keys make the FC4 extremely simple and a pleasure to operate.

Modern battery technology with state-of-the-art power management and the wide range of configuration possibilities for operation and signalling make the FC4 handset series extremely ergonomic —meaning improved security of operation and information.

GAP/CAP Standard

The DECT handsets in the funkwerk FC3/FC4 series use the tried-and-tested GAP and CAP DECT radio standards to ensure the highest connection and voice quality. This means that the handsets can be operated in any GAP-compatible DECT infrastructure.

→ *Pages 6-7*

Personal emergency signal functions

As high-quality personal emergency signalling devices the FC4 S (Securey) models are fitted with sensors for automatic alarms, special keys for manual alarms as well as functions for both area-specific and room-specific localisation.

→ *Pages 10-11*

Explosion protection

The models in the funkwerk FC4 Ex range offer specially designed and encapsulated housings and electronic protective measures to allow use in industrial environments with explosive dusts and gases—certified to strict regulations.

→ *Pages 8-9*

Accessories

Meet the demands of your specific application by rounding off your FC4 handsets with high-quality OEM accessories—whether chargers or replacement batteries, headsets or installation software.

→ *Pages 12-13*

Explosion protection with headset

Where high noise levels and explosive gases call for headphones and/or headsets, we recommend the explosion-proof HS models in the FC4 range.

→ *Pages 9, 11, 13*

Performance features

A detailed overview of all model variants available in the funkwerk FC4 handset range can be found at the end of this brochure.

→ *Pages 14-15*

funkwerk DSS user report

Clinic for Psychiatry and Psychotherapy in Kaiserslautern

In the Clinic for Psychiatry and Psychotherapy in Kaiserslautern a funkwerk DSS radio-based personal emergency signal system with telephone functions has been in operation since September 2005.

Customer portrait

The Clinic for Psychiatry and Psychotherapy in Kaiserslautern was established in September 2005 and is a part of the Pfalz Klinikum-Verbund, a regional group of clinics in the Palatinate with a total of 10 facilities. The in-patient section comprises 70 beds spread over four separate wards; the day-care section has a capacity for 20 patients. The patients are cared for by around 100 staff, including many on part-time contracts.

Choosing the system

As this was a new building the modern clinic was aiming for a state-of-the-art personal emergency signal system to be used at all of the clinic's hospital locations. The system had to provide a precise localisation function. The mobile handsets were to be designed not only as emergency alarms, but also function as internal telephones. The whole clinic organisation places great emphasis on involving the employees in personnel management decisions.

At an internal presentation four manufacturers were invited to present their systems to allow the employees to experience the equipment first hand, particularly the mobile handsets.

The decisive factors were the impressions of the staff, the price and the regulations specified in the German Employers' Liability Insurance Association's BGR 139 code. The clinic decided in favour of the system presented by Funkwerk Security Communications. Management and employees were equally convinced by the solution offered and so a DECT Secury system with 54 handsets, 38 location transmitters and 28 radio base stations was ordered.

The emergency signalling system in operation

Day-to-day life in the clinic is typified by the completely different daily routines of the individual patients. Generally the patients can move freely within the wards. Depending on the requirements, treatment services include one-on-one meetings, group discussions, ergotherapy and therapeutic exercising, everyday training, various indoor and outdoor activities, to name but a few. Relatives and friends are also free to visit at all times.

All employees on the premises carry a DECT handset with alarm function and can immediately trigger an alarm in an emergency. As the clinic employees are constantly on the move within the premises, the localisation function of the personal emergency signalling system plays a central role. Localisation sensors are installed at numerous locations throughout the building and permit precise localisation both indoors and in the clinic's grounds. Automatic alarms are triggered when staff find themselves in a threatening situation.

The clinic management is highly satisfied with the support provided by the manufacturer. Helmut Leim, Head of Technical Facility Management, commented: "The excellent support provided by the manufacturer during the installation phase, but especially in the follow-up period is an important factor that is decisive for using the emergency signalling system at other clinic locations."

In the end it was the turn of the clinic staff to give their opinion by completing a questionnaire on the use of the system and submitting points of criticism and suggestions for improvement. The feedback was so positive that the introduction of the personal emergency signalling system is already at the planning stage for a further clinic location.

funkwerk FC4: DECT industrial handset.

The funkwerk FC3/FC4 range offers GAP-compatible, high-quality DECT handsets for professional applications. All funkwerk FC4 models are also fully compatible with the I1, I3, I5 and I55 cellular integral DECT systems.

Thanks to the colour display, illuminated keypad, lithium-ion battery, incoming and outgoing call logs as well as messaging lists and a sturdy design these handsets are certainly a welcome addition to your communication system.

Comfortable features, e.g. hands-free operation, MIDI ringtones, vibration alarm signalling, easy operation using symbol-based user interface and memory-storage of the settings on a replaceable memory card (SIM card) are obligatory with the funkwerk FC3/FC4.

funkwerk FC4 set	5.010.800.100

Highlights of the funkwerk FC3/FC4 series:

- TFT colour display: 16 bit / 65,536 colours, with shockproof, scratch-resistant screen
- Illuminated keys, abrasion-resistant, with colour hotkeys for direct access to the icon-based menu control
- 20 MIDI ringtones, melody and volume can be set separately for internal and external calls, suitable for loud environments
- Loudspeaker for intelligible hands-free operation
- Diversity DECT antenna with improved reception quality
- Replaceable lithium-ion battery, 650 mAh, modern battery management with exact charge level indicator
- Local phone-book: 500 entries with name, two phone numbers and three lines for information details
- Real-time clock and calendar with alarm function
- All user entries are stored on an easily replaceable memory card (SIM card)

Quality made in Germany

Specifications of funkwerk FC4:

Dimensions	
Dimensions (L x W x H)	approx. 141 x 47 x 20 mm (with clip* approx. 141 x 47 x 30 mm)
Weight (incl. battery)	approx. 106 g (with clip* 113 g)
Degree of protection and temperature ranges	
Degree of protection:	IP 65 (jet-proof and dust-tight)
Temperature range:	Operation: –10 … +55 °C
	Battery charging: +5 … +40 °C
	Storage (short-term): –25 … +55 °C
Power supply:	
Replaceable lithium-ion battery:	650 mAh
Battery stand-by time:	up to 150 hours**
Battery talk time:	up to 17 hours**
DECT-HF:	
Frequency range:	1.88 … 1.9 GHz
Transmission power:	Mean value 10 mW, peak value 250 mW
Acoustic features:	
Acoustic alarm:	up to 100 dB(A)*** at a distance of 30 cm
Loudspeaker:	rear-mounted
Hands-free operation:	very good voice intelligibility
Vibration alarm:	additional or silent alarm
Memory:	
Memory Card (SIM card)	128 KB for telephone book, incoming and outgoing call logs and all user data

*) *Optional*
**) *Without standby display illumination*
***) *Depending on the ringtone selected, therefore also suitable for loud environments*

Ergonomic operation

The symbol-based and colour-coded user operation concept of the FC4 range allows optimum operation at all times and fast detection of the unit and messaging status.

Memory card (SIM card)

All user settings, all call logs and all stored messages, received and sent, are stored on a separate memory card and can therefore be comfortably transferred to a different handset.

Quick-replacement slot-in battery

The lithium-ion battery in the FC4 can be easily replaced by the user. A special charger (optional extra) allows simultaneous charging of the unit's battery and a spare battery.

funkwerk FC4 L

The range of functions is identical to the FC4, but the funkwerk FC4 L also includes an integrated position sensor that automatically triggers an alarm as soon as the device is moved more than 55° from the vertical position. A programmable pre-alarm (tone/vibration) prevents premature alarm signals, but if not reset a call is automatically made to a freely programmable telephone number with hands-free operation – a useful aid in an emergency.

funkwerk FC4 L set 5.010.830.100

funkwerk FC3

The all-round handset for all GAP-compatible telecommunication systems. The FC3 has all of the convenience features of the FC4, such as incoming and outgoing call logs, high degree of protection when dropped and is also dust-tight and jet-proof to IP 65.

The telephone features depend on the GAP telecommunication system used.

funkwerk FC3 set 5.010.800.000

funkwerk FC3 L

The funkwerk FC3 L DECT telephone for GAP-compatible telecommunication systems and increased security is fitted with a position sensor that, when triggered in an emergency, automatically initiates a distress call.

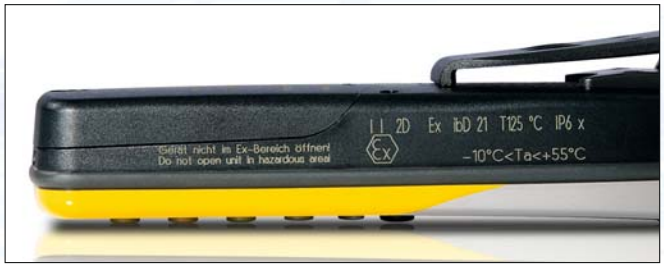
funkwerk FC3 L set 5.010.830.000

funkwerk FC4 Ex: The handset with explosion protection.

Industrial environments in chemical and power supply companies, refineries, etc., call for special equipment to be used in potentially explosive areas. The funkwerk FC4 Ex is an ATEX-certified DECT industrial handset designed for use both in explosive environments classified as Zone 1 (potentially explosive gases) and Zone 21 (potentially explosive dusts).

The features and facilities carried over from the FC4 make the funkwerk FC4 Ex a robust system telephone.

funkwerk FC4 Ex set 5.010.820.100



Highlights:

- Explosion protection: Gas zone 1, dust zone 21
- Degree of protection IP 65 (jet-proof and dust-tight)
- Robust design with screw-fastened battery
- Newly designed graphic user interface
- Keys and display illuminated for use in poor lighting conditions
- 20 MIDI ringtones, high volume up to 93 dB(A)
- Individual signalling for internal, external and messaging (ringtones, volume, duration, vibration with temporary muting)
- Hotkey for local telephone directory with 500 entries
- User-replaceable, screw-fastened lithium-ion battery with explosion protection
- Diversity DECT antenna for better connection quality
- Loudspeaker for hands-free operation

Quality made in Germany

Specifications funkwerk FC4 Ex:

Dimensions:	
Dimensions (L x W x H);	approx. 141 x 47 x 35 mm*
Weight (incl. battery):	approx. 133 g
Degrees of protection:	
Explosion protection zones 1/21:	Gas approved to ATEX 94/9/EG: II 2 G Ex ib IIC T4
	Dust approved to ATEX 94/9/EG: II 2 D EX ibD 21 T125°C IP6X
Degree of protection:	IP 65 (jet-proof and dust-tight)
Power supply:	
Replaceable lithium-ion battery:	650 mAh (screw fastenings)
Charge time:	approx. 5 hours
Battery life:	
Stand-by:	32 – 150 hours**
Talk time:	12 – 17 hours**
DECT-HF:	
Frequency range:	1.88 … 1.9 GHz
Transmission power:	Mean value 10 mW, peak value 250 mW
Acoustic features:	
Acoustic alarm:	up to 93 dB(A)*** at a distance of 30 cm
Loudspeaker:	rear-mounted
Hands-free operation:	very good voice intelligibility
Vibration alarm:	additional or silent alarm

*) *With clip*
**) *Without standby display illumination*
***) *Depending on the ringtone selected, therefore also suitable for loud environments*

funkwerk FC4 Ex HS

Specially for use in combination with a headset in ex-proof areas, the ATEX-certified DECT handset FC4 Ex HS is approved for operation with a headset in gas zone 1.

funkwerk FC4 Ex HS set
5.010.820.600

funkwerk FC4 L Ex

In addition to the integrated position sensor which is triggered when a 55° inclination is exceeded, the funkwerk FC4 L Ex model offers certified explosion protection.

funkwerk FC4 L Ex set
5.010.850.100

Robust FC4 variants with screw-fastened battery (without Ex protection)

funkwerk FC4 F

The FC4 F is fitted with a screw-fastened battery offering enhanced reliability in rugged environments.

funkwerk FC4 F set 5.010.810.100

funkwerk FC4 L F

In addition to the integrated position sensor which is triggered when a 55° inclination is exceeded, the screw-fastened battery in the FC4 L F is offering enhanced reliability in rugged environments.

funkwerk FC4 L F set 5.010.840.100

funkwerk FC4 S: The Secury handset for optimum personal security.

The latest generation funkwerk FC4 S personal emergency signal unit is designed to protect persons working solo or in potentially hazardous areas or situations. Programmable sensors for both manual and automatic alarms and functions enabling localisation with area and room accuracy are combined with the user-friendly telephone functions of the FC4.

The sturdy, dust-tight and jet-proof housing makes the FC4 S a personal emergency signal system device for the highest security demands. The Secury handsets comply completely with the provisions of BGR 139 and are certified to DIN V VDE V 0825-1.

funkwerk FC4 S set 5.010.860.100

Highlights:

- 4 manual alarm types: big red emergency call button for emergency call alarm 1+2, separate button for warning alarm 1+2
- Automatic alarm types: position alarm, no-motion alarm, time alarm and loss alarm to identify attack situations
- Localisation with inductive localisation transmitters (fine) and DECT base stations (rough)
- Watchman control functionality with localisation display
- Automatic safeguarding of device functions using sensor and localisation tests prior to use, 24-hour test
- Individual programming of the alarm types, times for pre-alarm/alarm and for the corresponding signals
- Complete integration of emergency call functions into the unit's operating concept
- High signal volume for noisy environments with additional vibration alarm
- Explosion-proof models for explosive gas and dust-loaded atmospheres
- Colour display, illuminated keys, symbol-based and colour-coded user guidance
- Lithium-ion technology for long battery life

Specifications funkwerk FC4 S:

Dimensions	
Dimensions (L x W x H)	approx. 168 x 47 x 35 mm
Weight (incl. battery)	approx. 150 g
Degrees of protection and temperature ranges	
Degree of protection:	IP 65 (jet-proof and dust-tight)
Operating temperature range:	Operation: -10 ... +55 °C
Power supply:	
Replaceable lithium-ion battery:	3.7 V / 650 mAh (screw fastenings)
Stand-by:	25 – 100 hours**
Talk time:	10 – 15 hours**
DECT-HF:	
Frequency range:	1.88 … 1.9 GHz
Transmission power:	Mean value 10 mW, peak value 250 mW
Acoustic features:	
Acoustic alarm:	up to 100 dB(A)* at a distance of 30 cm
Loudspeaker:	rear-mounted
Hands-free operation:	very good voice intelligibility
Vibration alarm:	additional or silent alarm
BG certification:	
BGR139	
DIN V VDE V 0825-1	
Ex certification (FC4 S Ex):	
Explosion-proof zones 1 and 11:	Gas appr. to ATEX 94/9/EG: II 2 G Ex ib IIC T4
	Dust approved to ATEX 94/9/EG: II 2 D EX ibD 21 T125°C IP6X

*) *Explosion-proof model: up to 94 dB(A)*
**) *Without standby display illumination*

Alarm types funkwerk FC4 S (Ex)

Emergency call alarms

Position alarm

Loss alarm

No-motion alarm

Time alarm

funkwerk FC4 S Ex

For employees in hazardous industrial environments requiring both explosion-protection for gas and/or dust and also optimum personal security, the funkwerk FC4 S Ex combines all of these features in a single device: user-friendly telephone and messaging functions, certified explosion protection and a wide range of sensors and alarm signalling functions.

funkwerk FC4 S Ex set 5.010.870.100

funkwerk FC4 S Ex HS

Our top-of-the-range model, equipped with all telephone and Secury functions of the FC4 range, offers certified explosion protection and enables headset operation in hazardous environments.

funkwerk FC4 S Ex HS set 5.010.870.600

Accessories

Lithium-ion Batteries

Battery for funkwerk FC4 (1)	5.010.808.000
Battery for funkwerk FC4 S/F (2)	5.010.868.000
Battery for funkwerk FC4 Ex/S Ex (3)	5.010.828.000

1 2 3

Chargers

For models with slot-in batteries

DC4 Standard (1)	5.010.809.800
DC4 M (multi-charger function) (1)	5.010.809.820
DC4 plus (for simultaneous charging of unit battery and spare/second battery, not illustrated)	5.010.809.000

1 2

For models with screw-type battery fastening

DC4 S/Ex Standard (2)	5.010.809.201
DC4 S/Ex M (multi-charger function) (2)	5.010.809.220
DC4 S/Ex plus (for simultaneous charging of unit battery and spare/second battery) (2)	5.010.809.200

Plug-in power supply unit for chargers

Plug-in power supply unit for DC4 (S/Ex) Standard (6,4 V 250 mA)	5.900.602.905
Plug-in power supply unit for DC4 (S/Ex) M/plus (6,4 V 620 mA)	5.900.602.814

Spare clip

Clip for FC4	5.010.117.000

Multi-chargers

Multi-charger 6-fold for FC4 (table-top model, suitable for wall-mounting)	5.010.809.860
Multi-charger 6-fold for FC4 S/Ex (table-top model, suitable for wall-mounting)	5.010.809.260
Plug-in power supply unit for multi-charger 6-fold FC4 (6.5 V 3 A)	5.900.602.988

Bags (see also page 15)

1 2 3

Leather bag, open design, loop with
2 press-studs for 45 mm belt (1) 5.010.117.500

Leather bag for FC4, open design,
fixed loop for 50 mm belt (2) 5.010.117.502

Leather bag for FC4, open design,
fixed loop for 80 mm belt (3) 5.010.117.503

Leather bag, closed design,
sewn with metal clip (4) 5.010.117.501

Leather bag, closed design, of hard leather,
sturdy industrial design, with metal clip (5) 5.010.117.506

4 5

Headsets

1 2

Headphones with microphone for funkwerk FC3, FC3 L,
FC4, FC4 L, FC4 S, FC4 F, FC4 Ex (HS),
FC4 L Ex (HS), FC4 S Ex (HS) (1) 5.010.105.101

Headset with sound insulation (2): on request

Software

Configuration tool for FC4 users

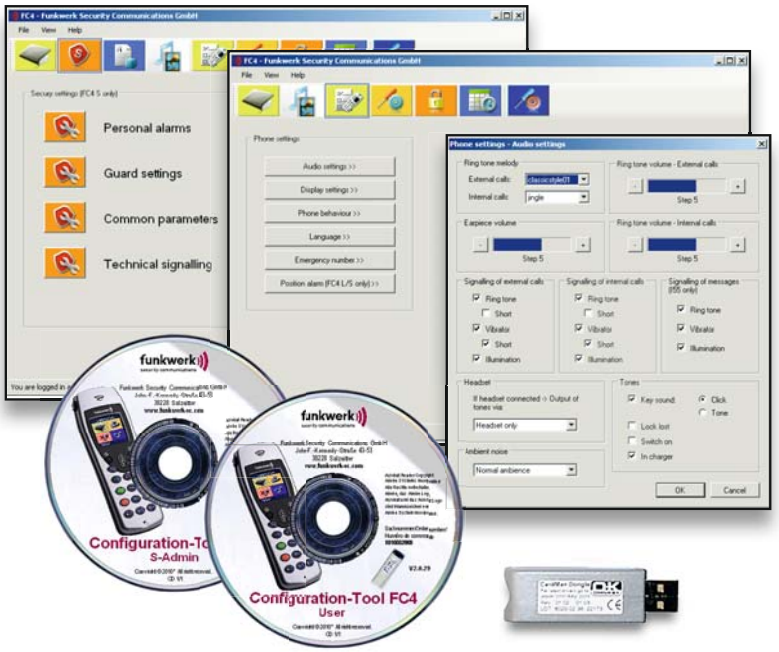
- User version
- User-friendly phone-book editor
- Setting of device and media parameters
- Data storage on memory card (SIM card) and on PC
- Incl. USB card adapter and CD
- Required operating system: Windows XP, Vista, Server 2003

5.010.882.000

Configuration tool for FC4 S Admin

- Secury administrator version
- All personal emergency signal system parameters
- User-friendly phone directory editor
- Setting of device and media parameters
- Data storage on memory card (SIM card) and on PC
- Incl. USB card adapter and CD
- Required operating system: Windows XP, Vista, Server 2003

5.010.884.000



Performance features

Features	FC3	FC3 L	FC4	FC4 F	FC4 L	FC4 L F	FC4 Ex	FC4 L Ex	FC4 Ex HS	FC4 Ex HS 50 mW	FC4 S	FC4 S Ex	FC4 S Ex HS	FC4 S Ex HS 50mW
Operating modes														
Operation in GAP-CAP systems	•	•	•	•	•	•	•	•	•	•	–	–	–	–
Operation in Integral-I1/I5/I55 systems	–	–	•	•	•	•	•	•	•	•	•	•	•	•
Personal emergency signal operation in I55 systems	–	–	–	–	–	–	–	–	–	–	•	•	•	•
10 system logins	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Manual and automatic system selection	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Housing														
Degree of protection IP 65 (dust-tight, jet-proof)	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Unit mechanics designed for height of fall of 2 m	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Extended falling prot. by screwing down the battery	–	–	–	–	–	•	•	•	•	•	•	•	•	•
Display														
High-contrast TFT colour display with 65536 colours	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Display and key lighting	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Audio														
Handsfree talking / open listening	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Microphone sensitivity can be adapted to the ambient noise level in 3 steps	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Vibration alarm	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Telephone muting	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Hotkey for temporary signal cancellation	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Separate MIDI ring tones for internal and external calls (up to 100 dB(A))	•	•	•	•	•	•	•+	•+	•+	•+	•	•+	•+	•+
10 signal tones / 8 volume steps for messaging and personal emergency signal system sensors (up to 96 dB(A))	•	•	•	•	•	•	•++	•++	•++	•++	•	•++	•++	•++
Time														
Realtime clock and calendar with alarm function	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Telephone directory														
500 telephone directory entries with name, call nos. 1 and 2, info 1-3	•	•	•	•	•	•	•	•	•	•	•	•	•	•
List of missed calls with time stamp, 20 entries	•	•	•	•	•	•	•	•	•	•	•	•	•	•
List of calls made with time stamp, 20 entries	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Redialling list with 20 entries	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Memory card														
Mem card (SIM card) in case of unit replacement*	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Battery														
Lithium-ion battery technology with intelligent power management 3.7 V 650 mA	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Interchangeable battery (needs no tools)	•	•	•	–	•	–	–	–	–	–	–	–	–	–
Interchangeable battery (screwed down)	–	–	–	•	–	•	•	•	•	•	•	•	•	•
Headset														
Operation with external headset	•	•	•	•	•	•	–	–	•	•	•	–	•	•
Emergency call														
Emergency call number on a lateral key	•	•	•	•	•	•	•	•	•	•	•**	•**	•**	•**
Automatic set-up of a voice connection when triggering an emergency call	•	•	•	•	•	•	•	•	•	•	•**	•**	•**	•**
Clip														
Clip	Δ	•	Δ	•	•	•	•	•	•	•	•	•	•	•
Position sensors														
55° sensors with programmable pre-alarm, main alarm and call target	–	•	–	–	•	•	–	•	–	–	•**	•**	•**	•**
Automatic set-up of a handsfree talking connection when sensor is triggered	–	•	–	–	•	•	–	•	–	–	•**	•**	•**	•**
Messaging														
Receive/transmit messages in Integral systems	–	–	•	•	•	•	•	•	•	•	•	•	•	•
Different signalling types when receiving messages	–	–	•	•	•	•	•	•	•	•	•	•	•	•
Message list, 20 entries	–	–	•	•	•	•	•	•	•	•	•	•	•	•
Message reception with automatic and manual acknowledgement	–	–	•	•	•	•	•	•	•	•	•	•	•	•
Tone type, volume and time can be set from 0 to ∞ for message tones	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Message display time can be set from 0 to ∞	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Explosion protection														
Gas explosion protection	–	–	–	–	–	–	•	•	•	•	–	•	•	•
Dust explosion protection	–	–	–	–	–	–	•	•	–	–	–	•	–	–
Operation with external headset in hazardous areas	–	–	–	–	–	–	–	–	•	•	–	–	•	•

*) = In case of repair (contains all unit settings including login data, call and message lists)

**) = Can be used in inactive personal security mode

+) = up to 94 dB(A)

++) = up to 93 dB(A)

Δ = Option

Features	FC3	FC3 L	FC4	FC4 F	FC4 L	FC4 L F	FC4 Ex	FC4 L Ex	FC4 Ex HS	FC4 Ex HS 50 mW	FC4 S	FC4 S Ex	FC4 S Ex HS	FC4 S Ex HS 50mW
Transmit power														
Reduced maximum transmit power for use in nuclear plants (50 mW)	–	–	–	–	–	–	–	–	–	•	–	–	–	•
Secury functions (personal emergency signal system)														
Personal emergency signal function certified acc. to BGR139 (DIN V VDE 0825-1)	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Big alarm pushbutton at the top	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Lateral warning alarm pushbutton	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Will-dependent alarms														
2 distinguishable emergency call alarms	–	–	–	–	–	–	–	–	–	–	•	•	•	•
2 distinguishable warning alarms	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Sensor alarms														
Position, no-motion, time and tear-off alarm	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Programmable pre- and personal alarms (individually for each alarm type)	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Sensor test and test of localisation function prior to commissioning	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Automatic or manual login in monitored personal emergency signal mode	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Cyclic monitoring with unit failure and transmission interruption message to both sides	–	–	–	–	–	–	–	–	–	–	•	•	•	•
24-hours sensor test	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Inductive localisation procedure for localisation with room and floor accuracy	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Localisation with area accuracy via DECT base stations	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Back-tracing and tracking of localisation in case of alarm	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Audio-monitoring (Eavesdropping) / hands-free talking in case of alarm	–	–	–	–	–	–	–	–	–	–	•	•	•	•
Guard control function	–	–	–	–	–	–	–	–	–	–	Δ	Δ	Δ	Δ

funkwerk FC3/FC4 sets

The funkwerk FC3/FC4 sets include handset, memory card, battery, charger, plug-in power supply unit and operating manual.

Clips as per table on page 14. Headsets are not included.

Bags

Bag suitable for	FC3	FC3 L	FC4	FC4 F	FC4 L	FC4 L F	FC4 Ex	FC4 L Ex	FC4 Ex HS	FC4 Ex HS 50 mW	FC4 S	FC4 S Ex	FC4 S Ex HS	FC4 S Ex HS 50mW
Leather bag for open wearing, strap with 2 press studs for 45 mm belts Part no. 5.010.117.500	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Leather bag for FC4 for open wearing, fixed strap for 50 mm belt Part no. 5.010.117.502	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Leather bag for FC4 for open wearing, fixed strap for 80 mm belt Part no. 5.010.117.503	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Leather bag, closed, sewn, with metal clip Part no. 5.010.117.501	•	#	•	#	#	#	#	#	#	#	–	–	–	–
Leather bag, closed, from solid leather, sturdy industrial version, with metal clip Part no. 5.010.117.506	•	#	•	#	#	#	–	–	–	–	–	–	–	–

= Holds handset only without clip

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Technical specifications are subject to change. Pictures: Funkwerk Security Communications GmbH, MEV-Verlag, Marc Stanties, iStockPhoto, Kilovolt.