

EN



Please note:
New prices - valid from
July 1, 2022
see: www.kern-sohn.com

KERN[®]

Counting scales/ Counting systems



2022



PROFESSIONAL MEASURING

KERN Pictograms



Internal adjusting:

Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)



Adjusting program CAL:

For quick setting up of the balance's accuracy. External adjusting weight required



Easy Touch:

Suitable for the connection, data transmission and control through PC or tablet. For details see page 123



Memory:

Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.



Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard. For details see page 215



Data interface RS-232:

To connect the balance to a printer, PC or network



RS-485 data interface:

To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible



USB data interface:

To connect the balance to a printer, PC or other peripherals



Bluetooth* data interface:

To transfer data from the balance to a printer, PC or other peripherals



WiFi data interface:

To transfer data from the balance to a printer, PC or other peripherals



Control outputs (optocoupler, digital I/O):

To connect relays, signal lamps, valves, etc.



Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements



Interface for second balance:

For direct connection of a second balance



Network interface:

For connecting the scale to an Ethernet network



KERN Communication Protocol (KCP):

It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems



GLP/ISO log:

The balance displays serial number, user ID, weight, date and time, regardless of a printer connection



GLP/ISO log:

With weight, date and time. Only with KERN printers, see page 163–165



Piece counting:

Reference quantities selectable. Display can be switched from piece to weight



Recipe level A:

The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



Recipe level B:

Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display



Totalising level A:

The weights of similar items can be added together and the total can be printed out



Percentage determination:

Determining the deviation in % from the target value (100 %)



Weighing units:

Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details



Weighing with tolerance range:

(Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model



Hold function:

(Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value



Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram. For details see page 53



Suspended weighing:

Load support with hook on the underside of the balance



Battery operation:

Ready for battery operation. The battery type is specified for each device



Rechargeable battery pack:

Rechargeable set



Universal plug-in power supply:

with universal input and optional input socket adapters for
A) EU, CH, GB
B) EU, CH, GB, USA
C) EU, CH, GB, USA, AUS



Plug-in power supply:

230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available



Integrated power supply unit:

Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request



Weighing principle: Strain gauges

Electrical resistor on an elastic deforming body



Weighing principle: Tuning fork

A resonating body is electromagnetically excited, causing it to oscillate



Weighing principle: Electromagnetic force compensation

Coil inside a permanent magnet. For the most accurate weighings



Weighing principle: Single cell technology:

Advanced version of the force compensation principle with the highest level of precision



Verification possible:

The time required for verification is specified in the pictogram



DAKkS calibration possible (DKD):

The time required for DAKkS calibration is shown in days in the pictogram



Factory calibration (ISO):

The time required for Factory calibration is shown in days in the pictogram



Package shipment:

The time required for internal shipping preparations is shown in days in the pictogram



Pallet shipment:

The time required for internal shipping preparations is shown in days in the pictogram

KERN – Measuring technology and testing services from a single source



Balances & Test service catalogue

Provides a complete overview of the KERN line of balances, test weights, and services such as verification, calibration, etc.



Medical scales catalogue

Complete line of medical scales, from infant scales to patient scales, chair scales and adiposity scales, as well as hand grip dynamometers, chemist's balances and veterinary scales.



Microscopes & refractometers catalogue

Extensive range in the area of optical instruments, such as, biological microscopes, stereo microscopes, metallurgical microscopes, polarisation microscopes as well as analogue and digital refractometers.



SAUTER measuring equipment catalogue

Test instruments for industry and commerce, such as force, coating thickness, material thickness and calibration service.



DAkkS calibration service brochure

Detailed information on topics pertaining to the calibration and verification of balances, test weights, and force measuring devices.

Your advantages

fast

- 24 hours delivery service for products in stock – ordered today, on its way tomorrow
- Sales & service hotline available from 8:00 am to 6:00 pm

reliable

- Up to 3 years warranty
- Precision in weighing technology for more than 175 years

competent

- DAkkS accreditation DIN EN ISO/IEC 17025
- Certified QM system DIN EN ISO 9001
- Authorisation for initial verification by the manufacturer 2014/31/EU
- Medical certifications DIN EN ISO 13485 and 93/42/EWG

versatile

- One-stop shopping: from pocket balances through to 12 t crane balance – everything from one supplier
- Find the product you want at lightning speed with the “Balance Quick-Finder” at www.kern-sohn.com



Order hotline
+49 7433 9933-0



Service hotline
+49 7433 9933-199



Calibration hotline
+49 7433 9933-196



Our team of consultants will assist you
from Monday to Friday
from 8:00 am to 6:00 pm



Online Shop
www.kern-sohn.com



E-mail order
info@kern-sohn.com



Fax order
+49 7433 9933-149



www.kern-sohn.com
Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary, images and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a clever test weight and balance search engine.

- > High-resolution counting system with EC type approval
- > Maximum number of countable parts is 999,999
- > High-precision reference scale
- > Robust quantity scale
- > Both scales can be used individually



Counting scales/Counting systems

Interesting facts about counting

Smallest part weight for piece counting

This is the smallest piece weight the scale will accept for piece counting and will display it piece by piece. In practice, depending on the required accuracy, we recommend to choose a counting scale with a minimum piece weight smaller than the weight of the item to be counted. To make it easier for you to select the right model, we specify the smallest part weight when counting under laboratory conditions and normal conditions, see the website.

► Counting resolution

Describes the maximum quantity which can be counted with a counting accuracy of 1 %, with a minimum variation of item weights and a sufficiently large ► **reference quantity** (20 pieces with counting resolution $\leq 60,000$ points, 50 pieces from 60,000–150,000 points, 100 pieces $\geq 150,000$ points). This therefore is an indication of the quality of the counting scale.

Recommended ► reference quantity

Weight tolerances of pieces to be counted are the most significant sources of error when counting. Therefore, at the start of every counting procedure, establish an average weight, the so-called ► **reference weight**, by placing several pieces on the balance, the so-called reference quantity. Usually this would be:

- 5 pieces >> often sufficient
- 10 pieces >> common practise
- 20–100 pieces >> for large deviations among piece weights

The “automatic ► **reference optimisation**” function increases the reference quantity gradually, whereby the average piece weight is optimised step by step. This contributes considerably to the accuracy of the subsequent counting processes.

Which counting scale for which application?

Simple counting scale

with self-explanatory user guidance on the keyboard. The graphic control panel enables you to start working immediately, without having to consult the user manual. Easy handling, value for money.

Professional counting scale

with 3 separate displays for reference weight (average weight of the pieces), total weight of all pieces and total quantity of all pieces. Very useful integrated memories, e.g. for container weight, item number, reference weight as well as audible and visual counting aids and an alphanumeric key pad for easy data entry.

Special tip for counting large quantities:

Counting systems








The weighing capacities of bench counting scales are often not sufficient to count large quantities, units, palletized items, etc. Here high-performance counting systems come into operation, as these combine a high-precision reference scale with a high-capacity bulk scale.

► **See the glossary on page 215–217**

Quick-Finder Counting scales/Counting systems

Readability [d] g	Weighing capacity [Max] kg	Counting resolution Points	Model	Page							
			KERN	For an explanation on the pictos, see front flap							
0,001	0,3	60.000	CFS 300-3	76	1	●	●	●	●	●	○
0,001	0,36	360.000	CKE 360-3	77	1	●	●	●	●	●	○
0,001	6	1.200.000	CCS 6K-6	82	2	●	●	●	●	●	○
0,001	15	300.000	CCS 10K-6	82	2	●	●	●	●	●	○
0,01	3	60.000	CFS 3K-5	76	1	●	●	●	●	●	○
0,01	3,6	360.000	CKE 3600-2	77	1	●	●	●	●	●	○
0,01	3 6	6.000.000	CCA 6K-5M	80	2	○	●	●	●	●	○
0,01	6 15	15.000.000	CCA 10K-5M	80	2	○	●	●	●	●	○
0,01	30	600.000	CCS 30K0.01.	82	2	●	●	●	●	●	○
0,01	15 30	30.000.000	CCA 30K-5M	80	2	○	●	●	●	●	○
0,01	30 60	60.000.000	CCA 60K-5M	80	2	○	●	●	●	●	○
0,01	60	1.200.000	CCS 60K0.01.	82	2	●	●	●	●	●	○
0,01	60	1.200.000	CCS 60K0.01L.	82	2	●	●	●	●	●	○
0,01	60 150	150.000.000	CCA 100K-5M	80	2	○	●	●	●	●	○
0,01	150	3.000.000	CCS 150K0.1L	82	2	●	●	●	●	●	○
0,01	150 300	300.000.000	CCA 300K-5M	80	2*	○	●	●	●	●	○
0,01	300	6.000.000	CCS 300K0.01	82	2*	●	●	●	●	●	○
0,01	600	12.000.000	CCS 600K-2U	82	4*	●	●	●	●	●	○
0,02	4	200.000	CDS 4K0.02	79	1	●	●	●	●	●	○
0,02	6	300.000	CKE 6K0.02	77	1	●	●	●	●	●	○
0,05	8	160.000	CKE 8K0.05	77	1	●	●	●	●	●	○
0,05	15	300.000	CDS 15K0.05	79	1	●	●	●	●	●	○
0,05	16	320.000	CKE 16K0.05	77	1	●	●	●	●	●	○
0,1	6	60.000	CPB 6K0.1N	75	1	●	●	●	●	●	○
0,1	6	60.000	CFS 6K0.1	76	1	●	●	●	●	●	○
0,1	16	160.000	CKE 16K0.1	77	1	●	●	●	●	●	○
0,1	16	160.000	CDS 16K0.1	79	1	●	●	●	●	●	○
0,1	30	300.000	CCS 30K0.1.	82	2	●	●	●	●	●	○
0,1	30	300.000	CDS 30K0.1	79	1	●	●	●	●	●	○
0,1	30	300.000	CDS 30K0.1L	79	1	●	●	●	●	●	○
0,1	36	360.000	CKE 36K0.1	77	1	●	●	●	●	●	○
0,1	60	600.000	CCS 60K0.1.	82	2	●	●	●	●	●	○
0,1	60	600.000	CCS 60K0.1L.	82	2	●	●	●	●	●	○
0,1	150	1.500.000	CCS 150K0.1.	82	2	●	●	●	●	●	○
0,1	150	3.000.000	CCS 150K0.01L	82	2	●	●	●	●	●	○
0,1	300	3.000.000	CCS 300K0.1	82	2	●	●	●	●	●	○
0,1	300 600	6.000.000	CCS 600K-1S	82	4*	●	●	●	●	●	○
0,1	300 600	6.000.000	CCS 600K-1	82	4*	●	●	●	●	●	○
0,1	600 1500	15.000.000	CCS 1T-4S	82	4*	●	●	●	●	●	○
0,1	600 1500	15.000.000	CCS 1T-4	82	4*	●	●	●	●	●	○
0,1	1500	15.000.000	CCS 1T-1U	82	4*	●	●	●	●	●	○
0,1	1500	15.000.000	CCS 1T-1L	82	4*	●	●	●	●	●	○
0,1	1500 3000	30.000.000	CCS 3T-3	82	4*	●	●	●	●	●	○
0,1	1500 3000	30.000.000	CCS 3T-3L	82	4*	●	●	●	●	●	○
0,1 0,2	3 6	60.000	IFS 6K-4S	78	1	●	●	●	●	●	○
0,1 0,2	6 15	75.000	IFS 10K-4	78	1	●	●	●	●	●	○
0,2	3	30.000	CIB 3K-4	73	1	●	●	●	●	●	○
0,2	3	30.000	CXB 3K0.2	74	1	●	●	●	●	●	○
0,2	15	60.000	CPB 15K0.2N	75	1	●	●	●	●	●	○
0,2	15	75.000	CFS 15K0.2	76	1	●	●	●	●	●	○
0,2	36	180.000	CDS 36K0.2L	79	1	●	●	●	●	●	○
0,2	60	300.000	CDS 60K0.2	79	1	●	●	●	●	●	○
0,2	65	325.000	CKE 65K0.2	77	1	●	●	●	●	●	○
0,2 0,5	12 30	60.000	IFS 30K0.2DL	78	1	●	●	●	●	●	○
0,5	6	30.000	CIB 6K-4	73	1	●	●	●	●	●	○
0,5	6	30.000	CXB 6K0.5	74	1	●	●	●	●	●	○
0,5	30	60.000	CPB 30K0.5N	75	1	●	●	●	●	●	○
0,5	30	60.000	CFS 30K0.5	76	1	●	●	●	●	●	○
0,5 1	30 60	60.000	IFS 60K0.5D	78	1	●	●	●	●	●	○
0,5 1	30 60	60.000	IFS 60K0.5DL	78	1	●	●	●	●	●	○
1	3	30.000	CXB 3K1NM	74	1	○	●	●	●	●	○
1	15	30.000	CIB 10K-3	73	1	●	●	●	●	●	○
1	15	30.000	CXB 15K1	74	1	●	●	●	●	●	○
1	50	50.000	CFS 50K-3	76	1	●	●	●	●	●	○
1 2	3 6	30.000	CCA 6K-4M	80	1	○	●	●	●	●	○
1 2	3 6	60.000	IFS 6K-3SM	78	1	○	●	●	●	●	○
1 2	3 6	60.000	IFS 6K-3M	78	1	○	●	●	●	●	○
1 2	3 6	60.000	CPB 6K1DM	75	1	○	●	●	●	●	○
1 2	75 150	60.000	IFS 100K-3	78	1	●	●	●	●	●	○
1 2	75 150	60.000	IFS 100K-3L	78	1	●	●	●	●	●	○
2	6	30.000	CXB 6K2NM	74	1	○	●	●	●	●	○

Quick-Finder Counting scales/Counting systems

Readability [d] g	Weighing capacity [Max] kg	Counting resolution Points	Model	Page							
					For an explanation on the pictos, see front flap						
2	30	30.000	CIB 30K-3	73	1		●				●
2	30	30.000	CXB 30K2	74	1		●				●
2 5	6 15	60.000	CPB 15K2DM	75	1	○	●		●		○
2 5	6 15	75.000	IFS 10K-3M	78	1	○	●	●	●		○
2 5	6 15	75.000	IFS 10K-3LM	78	1	○	●	●	●		○
2 5	6 15	75.000	IFS 300K-3	78	1		●	●	●		○
2 5	6 15	75.000	CCA 10K-4M	80	1	○	●	●	●		○
5	15	30.000	CXB 15K5NM	74	1	○	●				●
5	150	3.000.000	CCS 150K0.01	82			●	●	●	●	○
5 10	15 30	1.500.000	CCA 30K-4M	80	1	○	●	●	●		○
10	30	30.000	CXB 30K10NM	74	1	○	●				●
10 20	30 60	60.000	IFS 60K-2M	78	1	○	●	●	●		○
10 20	30 60	60.000	IFS 60K-2LM	78	1	○	●	●	●	●	○
10 20	30 60	3.000.000	CCA 60K-4M	80	1	○	●	●	●		○
20 50	60 150	60.000	IFS 100K-2M	78	1	○	●	●	●	●	○
20 50	60 150	60.000	IFS 100K-2LM	78	1	○	●	●	●	●	○
20 50	60 150	7.500.000	CCA 100K-4M	80	1	○	●	●	●		○
50	15 30	60.000	CPB 30K5DM	75	1	○	●		●		○
50	15 30	60.000	IFS 30K-3M	78	1	○	●	●	●		○
50	150	1.500.000	IFS 300K-2M	78	1	○	●	●	●	●	○
50 100	150 300	15.000.000	CCA 300K-4M	80	1	○	●	●	●		○

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* Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs

● = standard ○ = option



Robust counting scale with large article memory, convenient operating philosophy and checkweighing display, counting resolution up to 30,000 points

Features

- Innovative counting with tolerance range (Checkweighing):
The counting process can be supported visually and/or audibly and this therefore makes portion division, dispensing and grading easier
 - visual signal: the colour of the display changes depending on the counting result (not enough/ok/too much)
 - audible signal: the frequency of the audible signal changes depending on the counting result (not enough/ok/too much)
- Ideal for workshops for people with disabilities, particularly loud or quiet environments, where operators change frequently, etc.
- Three displays for weight display, reference weight, total pieces
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Programmable using numerical key pad:
 - required reference quantity
 - known reference weight

- Counting results memory: adds up all individual piece counts, result is shown in total weight and total pieces
- PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels
- 20 direct price keys for frequently recurring reference weights and PRE-Tare values
- Memory for 50 reference weights and PRE-Tare values
- High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations
- Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- Energy management: Backlight turns off after 5 sec, can be switched off
- Protective working cover included with delivery

Technical data

- Large backlit LCD displays, digit height 18 mm
- Dimensions weighing surface, Stainless Steel, WxD 350x215 mm Overall dimensions WxDxH, 350x330x120 mm
- Net weight approx. 4,0 kg
- Permissible ambient temperature, Permissible ambient temperature -10 °C/40 °C

Accessories

- Protective working cover, scope of delivery: 5 items, KERN RIB-A01S05
- Internal rechargeable battery pack, operating time up to 160 h without backlight, charging time approx. 14 h, KERN GAB-A04

STANDARD

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OPTION

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Model	Weighing capacity [Max] kg	Readability [d] g	Smallest part weight [Normal] g/piece	Counting resolution Points	Option	
					DAKKS Calibr. Certificate	DAKKS KERN
KERN						
CIB 3K-4	3	0,2	1	30.000		963-127
CIB 6K-4	6	0,5	2	30.000		963-128
CIB 10K-3	15	1	5	30.000		963-128
CIB 30K-3	30	2	10	30.000		963-128



Note: Official verification is mandatory for commercial trade.

Entry level model into professional counting, also with EC type approval [M], counting resolution of 30,000 points

Features

- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Programmable using numerical key pad:
 - required reference quantity
 - known reference weight
- Three displays for weight display, reference weight, total pieces
- Audible Fill-to-target: target quantity or target weight can be programmed, e. g. for checkweighing. When the target value is reached, a signal will sound
- 10 memories for reference weights
- Counting results memory: adds up all individual piece counts, result is shown in total weight and total pieces
- Energy management: Backlight turns off after 5 sec

- PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels
- Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- Protective working cover included with delivery
- Internal rechargeable battery pack included with the delivery

Accessories

- Protective working cover, scope of delivery: 5 items, KERN CXB-A01S05
- Internal rechargeable battery pack, operating time up to 200 h without backlight, charging time approx. 8 h, KERN GAB-A04

Technical data

- Large backlit LCD displays, digit height 18 mm
- Dimensions weighing surface, Stainless Steel, WxD 300x225 mm
- Dimensions housing WxDxH, 300x330x110 mm
- Internal rechargeable battery pack, operating time up to 200 h without backlight, charging time approx. 8 h
- Net weight approx. 4,0 kg
- Permissible ambient temperature -10 °C/40 °C

STANDARD

CAL EXT PCS SUM ACCU 230 V DMS 1 DAY

OPTION FACTORY

DAKKS +3 DAYS M +3 DAYS CXB-NM

Model	Weighing capacity [Max] kg	Readability [d] g	Verification value [e] g	Minimal load [Min] g	Smallest part weight [Normal] g/piece	Counting resolution Points	Net weight approx. kg	Option	
								Verification	DAKKS Calibr. Certificate
KERN								M KERN	DAKKS KERN
CXB 3K0.2	3	0,2	-	-	1	30.000	4,0	-	963-127
CXB 6K0.5	6	0,5	-	-	2	30.000	4,0	-	963-128
CXB 15K1	15	1	-	-	5	30.000	4,0	-	963-128
CXB 30K2	30	2	-	-	10	30.000	4,2	-	963-128

Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.

CXB 3K1NM	3	1	1	20	1	30.000	4,0	965-227	963-127
CXB 6K2NM	6	2	2	40	2	30.000	4,2	965-228	963-128
CXB 15K5NM	15	5	5	100	5	30.000	4,0	965-228	963-128
CXB 30K10NM	30	10	10	200	10	30.000	4,2	965-228	963-128



Note: Official verification is mandatory for commercial trade.

Professional model, also with EC type approval [M], counting resolution up to 60,000 points

Features

- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Programmable using numerical key pad:
 - required reference quantity
 - known reference weight
- Three displays for weight display, reference weight, total pieces
- Counting results memory: adds up all individual piece counts, result is shown in total weight and total pieces
- Fill-to-target function: Target count or target weight can be programmed. When the target weight is reached there is an audible and visual signal
- PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels

- High mobility: thanks to rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)
- Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- Protective working cover included with delivery

Technical data

- Large backlit LCD displays, digit height 20 mm
- Dimensions weighing surface, Stainless Steel, WxD 295x225 mm Overall dimensions WxDxH 315x350x105 mm
- Net weight approx. 3,2 kg
- Permissible ambient temperature 0 °C/40 °C

Accessories

- Protective working cover, scope of delivery: 5 items, KERN CFS-A02S05
- Internal rechargeable battery pack, operating time up to 90 h without backlight, charging time approx. 12 h, KERN GAB-A04
- Signal lamp for visual support of weighing with tolerance range, only in combination with, KERN CFS-A03
- Y-cable for parallel connection of two terminal devices to the RS-232 interface on the scale, e.g. signal lamp and printer, KERN CFS-A04
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD										OPTION		FACTORY	
CAL EXT	RS 232	KCP	PCS	SUM	TOL	MULTI	DMS	1 DAY	ACCU	DAkKS	M	+3 DAYS	
											CPB-DM		

Model	Weighing capacity [Max] kg	Readability [d] g	Verification value [e] g	Minimal load [Min] g	Smallest part weight [Normal] g/piece	Counting resolution Points	Option					
							Verification		DAkKS Calibr. Certificate			
KERN									DAkKS			
CPB 6K0.1N	6	0,1	-	-	1	60.000	-		KERN		963-128	
CPB 15K0.2N	15	0,2	-	-	2,5	60.000	-				963-128	
CPB 30K0.5N	30	0,5	-	-	5	60.000	-				963-128	
Dual-range balance switches automatically to the next largest weighing capacity [Max] and readability [d]												
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible.												
Verification at the factory, we need to know the full address of the location of use.												
CPB 6K1DM	3 6	1 2	1 2	20	1	60.000	965-228				963-128	
CPB 15K2DM	6 15	2 5	2 5	40	2,5	60.000	965-228				963-128	
CPB 30K5DM	15 30	5 10	5 10	100	5	60.000	965-228				963-128	



Professional, high-resolution counting scale with 100 item memories and second balance interface, counting resolution up to 75,000 points

Features

- Memory (PLU) for 100 items with additional text, reference weight and tare weight, e.g. of a container
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Programmable using numerical key pad:
 - required reference quantity
 - known reference weight
- Three displays for weight display, reference weight, total pieces
- Weighing with tolerance range (checkweighing): a visual and audible signal helps with portioning, dispensing or grading
- Fill-to-target function
Programmable target quantity or target weight. A signal will be displayed when the target value is reached
- PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels

- Second balance interface to construct a high-resolution counting system, standard, e.g. with weighing bridges of KERN KFP V20
- Draught shield standard for models with weighing plate size **A**, weighing space W×D×H 158×143×64 mm
- Protective working cover included with delivery, for models with weighing plate size **A**, **B**

Technical data

- Large backlit LCD displays, digit height 20 mm
- Dimensions weighing surface
 - A** Ø 80 mm
 - B** W×D 295×225 mm
 - C** W×D 370×240 mm
- Overall dimensions W×D×H
 - A** 315×350×180 mm (incl. draught shield)
 - B** 315×350×180 mm
 - C** 375×350×130 mm
- Permissible ambient temperature 0 °C/40 °C

Accessories

- Protective working cover, scope of delivery: 5 items, for models with weighing plate size **A**, **B**, KERN CFS-A02S05
- Internal rechargeable battery pack, operating time up to 70 h without backlight, charging time approx. 14 h, KERN GAB-A04
- Signal lamp for visual support of weighing with tolerance range, only in combination with, KERN CFS-A03
- Y-cable for parallel connection of two terminal devices to the RS-232 interface on the scale, e.g. signal lamp and printer, KERN CFS-A04
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD										OPTION		
CAL EXT	MEMORY	RS 232	KCP	DUAL	SUM	TOL	MULTI	DMS	1 DAY	ET	ACCU	DAKkS
												+3 DAYS

Model	Weighing capacity [Max] kg	Readability [d] g	Smallest part weight [Normal] g/piece	Counting resolution Points	Net weight approx. kg	Weighing plate	Option	
							DAKkS	Calibr. Certificate
KERN CFS 300-3	0,3	0,001	0,05	60.000	2,6	A	963-127	
CFS 3K-5	3	0,01	0,5	60.000	3,4	B	963-127	
CFS 6K0.1	6	0,1	1	60.000	3,2	B	963-128	
CFS 15K0.2	15	0,2	2	75.000	3,4	B	963-128	
CFS 30K0.5	30	0,5	5	60.000	3,4	B	963-128	
CFS 50K-3	50	1	10	50.000	4,4	C	963-128	



Easy to use, self-explanatory counting scale with laboratory accuracy, counting resolution up to 360,000 points

Features

- Self-explanatory graphic control panel, the workings steps can be understood immediately, even without operating instructions
 - no learning time = reduces costs
 - ideal for untrained users
 - visualised process avoids operating errors
- The 4 steps are carried out from left to right:
 - 1 Place the empty container onto the weighing plate and tare by pressing the TARE key
 - 2 Place the reference quantity for the goods to be counted into the container (5, 10, 20 or any number of pieces)
 - 3 Confirm the selected reference quantity by pressing the key (5, 10, 20 or any number of pieces)
 - 4 Pour in the goods to be counted. The number of pieces will immediately be shown in the display
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value

- Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- Draught shield standard for models with weighing plate size \varnothing 81 mm, weighing space \varnothing 90x40 mm
- Protective working cover included with delivery

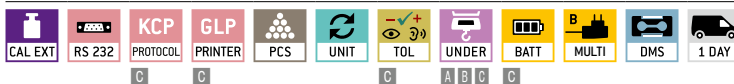
Technical data

- Large backlit display
 - A, B digit height 9 mm
 - C digit height 18 mm
- Dimensions weighing surface
 - A \varnothing 81 mm, plastic
 - B WxD 150x170 mm, stainless steel
 - C WxD 340x240 mm, stainless steel
- Overall dimensions WxDxH
 - A, B 167x250x85 mm
 - C 350x390x120 mm
- Optional battery operation, 6x1.5 V Size C not included, operating time up to 40 h, for models with weighing plate size C
- Permissible ambient temperature 10 °C/40 °C

Accessories

- Protective working cover, scope of delivery: 5 items, for models with weighing plate size
 - A KERN PCB-A02S05
 - B KERN PCB-A05S05
 - C KERN FKB-A02S05
- Rechargeable battery pack external, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KS-A01
- Internal rechargeable battery pack, operating time up to A, B 30 h, C 90 h without backlight, charging time approx. 10 h,
 - A, B KERN KB-01N
 - C KERN PCB-A01
- USB data interface, for transferring weighing to the PC, printer etc., for models with weighing plate size C, KERN CKE-A02
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD



OPTION



FACTORY



Model	Weighing capacity [Max] kg	Readability [d] g	Smallest part weight [Normal] g/piece	Counting resolution Points	Net weight approx. kg	Weighing plate	Option	
							DAkks Calibr. Certificate	DAkks KERN
KERN								
CKE 360-3	0,36	0,001	0,01	360.000	1	A	963-127	
CKE 3600-2	3,6	0,01	0,1	360.000	1,8	B	963-127	
CKE 6K0.02	6	0,02	0,2	300.000	7	C	963-128	
CKE 8K0.05	8	0,05	0,5	160.000	7	C	963-128	
CKE 16K0.05	16	0,05	0,5	320.000	7	C	963-128	
CKE 16K0.1	16	0,1	1	160.000	7	C	963-128	
CKE 36K0.1	36	0,1	1	360.000	7	C	963-128	
CKE 65K0.2	65	0,2	2	325.000	7	C	963-129	



Industrial counting scale with convenient decimal keypad for easy data entry – now also with EC type approval [M], counting resolution up to 75000 points

Features

- Tough industry standard suitable for use in harsh industrial applications
- Ergonomic display device with large keypad and high-contrast LCD display for easy entry and reading of, e.g., tare weights, reference weights, limit values etc.
- Three displays for weight display, reference weight, total pieces
- 100 item memories for master data such as reference weight, reference quantity, container weight (PRE-TARE) etc.
- Printout of date and time for GLP and GMP compliant data logging

- Precise counting: The manual reference weight optimisation gradually improves the average value of the piece weight
- Totalising of pieces when counting
- Protective working cover included with delivery

Technical data

- Large backlit LCD displays, digit height 16,5 mm
- Dimensions weighing surface, Stainless Steel
 - A 230×230×110 mm
 - B 300×240×110 mm
 - C 400×300×120 mm
 - D 500×400×140 mm
 - E 650×500×140 mm

- Dimensions of display device W×D×H
260×150×65 mm
- Cable length of display device approx. 3 m
- Permissible ambient temperature -10 °C/40 °C

Accessories

- Protective working cover, scope of delivery: 5 items, KERN KFB-A02S05
- **1** Stand to elevate display device
Height of stand approx. 330 mm, KERN IFB-A01
Height of stand approx. 600 mm, for models with weighing plate size **D**, **E**, KERN IFB-A02
- Internal rechargeable battery pack, operating time up to 40 h, without backlight, charging time approx. 12 h, must be ordered at purchase, KERN KFB-A01
- ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD



OPTION



FACTORY



Model	Weighing capacity [Max] kg	Readability [d] g	Verification value [e] g	Smallest part weight [Normal] g/piece	Counting resolution Points	Net weight approx. kg	Weighing plate	Option				
								Verification		DAkkS Calibr. Certificate		
KERN								M IFS-M	KERN	DAkkS KERN		
Dual-range balance switches automatically to the next largest weighing capacity [Max] and readability [d]												
IFS 6K-4S	3 6	0,1 0,2	-	1	60.000	4,6	A		-		963-128	
IFS 10K-4	6 15	0,1 0,2	-	2	75.000	6	B		-		963-128	
IFS 30K0.2DL	12 30	0,2 0,5	-	5	60.000	11	C		-		963-128	
IFS 60K0.5D	30 60	0,5 1	-	10	60.000	10	C		-		963-129	
IFS 60K0.5DL	30 60	0,5 1	-	10	60.000	12	D		-		963-129	
IFS 100K-3	75 150	1 2	-	25	60.000	12	D		-		963-129	
IFS 100K-3L	75 150	1 2	-	25	60.000	20	E		-		963-129	
IFS 300K-3	150 300	2 5	-	50	60.000	22	E		-		963-129	

Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible.

Verification at the factory, we need to know the full address of the location of use.

IFS 6K-3SM	3 6	1 2	1 2	1	60.000	6	A		965-228		963-128	
IFS 6K-3M	3 6	1 2	1 2	1	60.000	6	B		965-228		963-128	
IFS 10K-3M	6 15	2 5	2 5	2	75.000	6	B		965-228		963-128	
IFS 10K-3LM	6 15	2 5	2 5	2	75.000	10	C		965-228		963-128	
IFS 30K-3M	15 30	5 10	5 10	5	60.000	10	C		965-228		963-128	
IFS 60K-2M	30 60	10 20	10 20	10	60.000	11	C		965-229		963-129	
IFS 60K-2LM	30 60	10 20	10 20	10	60.000	13	D		965-229		963-129	
IFS 100K-2M	60 150	20 50	20 50	25	60.000	12	D		965-229		963-129	
IFS 100K-2LM	60 150	20 50	20 50	25	60.000	22	E		965-229		963-129	
IFS 300K-2M	150 300	50 100	50 100	50	60.000	22	E		965-229		963-129	



Easy to use industrial counting scale for heavy loads, counting resolution up to 300,000 points

Features

- Self-explanatory graphic control panel, the workings steps can be understood immediately, even without operating instructions
 - no learning time = reduces costs
 - ideal for untrained users
 - visualised process avoids operating errors
- The 4 steps are carried out from left to right:
 - 1 Place the empty container onto the weighing plate and tare by pressing the TARE key
 - 2 Place the reference quantity for the goods to be counted into the container (5, 10 or 20 pieces)
 - 3 Confirm the selected reference quantity by pressing the key (5, 10 or 20)
 - 4 Pour in the goods to be counted. The number of pieces will immediately be shown in the display
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Protective working cover included with delivery

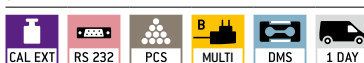
Technical data

- Backlit LCD display, digit height 18 mm
- Dimensions weighing surface, Stainless Steel
 - A W×D 228×228 mm
 - B W×D 308×318 mm
 - C W×D 450×350 mm
- Dimensions of display device W×D×H 225×115×60 mm
- Permissible ambient temperature 10 °C/40 °C

Accessories

- Protective working cover over the display device, scope of delivery: 5 items, KERN DE-A12S05
- Mount to fasten the display device to the platform, for models with weighing plate size B, C, can be reordered, KERN DE-A11N
- 5 Stand to elevate display device, height of stand approx. 480 mm, can be reordered, KERN DE-A10
- Rechargeable battery pack external, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KS-A01
- Internal rechargeable battery pack, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KB-A01N
- 6 Set for underfloor weighing, consists of platform, bow, hook, only for models with weighing plate B, KERN DS-A01
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD



OPTION



Model	Weighing capacity [Max] kg	Readability [d] g	Smallest part weight [Normal] g/piece	Counting resolution Points	Net weight approx. kg	Cable length approx. m	Weighing plate	Option	
								DAkkS KERN	DAkkS Calibr. Certificate
CDS 4K0.02	4	0,02	0,2	200.000	6	2	A	963-127	
CDS 15K0.05	15	0,05	0,5	300.000	8	2	B	963-128	
CDS 16K0.1	16	0,1	1	160.000	8	2	B	963-128	
CDS 30K0.1	30	0,1	1	300.000	8	2	B	963-128	
CDS 30K0.1L	30	0,1	1	300.000	10	0,6	C	963-128	
CDS 36K0.2L	36	0,2	2	180.000	10	0,6	C	963-128	
CDS 60K0.2	60	0,2	2	300.000	10	0,6	C	963-129	



High-resolution counting system with EC type approval to count the smallest parts in large quantities, maximum number of parts which can be displayed is 999,999 – many new models now

Features

- The highly accurate KERN CCA counting system can replace a whole range of individual balances, efficiently and at a reasonable price
- Thanks to EC type approval, it is also suitable for use in verified applications
- The balances are connected to one another with an RS-232 Y-cable, which also allows you to connect an end unit, such as, for example, signal lamps, barcode scanners or printers

Reference scale KERN

- This precision balance, which can be used as an individual balance, also fulfils the highest demands through connection with a high-capacity weighing bridge
- Programmable using numerical key pad:
 - required reference quantity
 - known reference weight
- Easy to use: All primary functions have their own key on the keypad
- Automatic internal adjustment, time-controlled every 2 h, guarantees high degree of accuracy and makes the balance independent of its location
- Capacity display: A bargraph display lights up to show how much of the weighing range is still available
- USB data interface for transferring weighing data to the PC, printer etc. Can only be used in combination with KERN DBS-A02 accessories
- Draught shield standard for models with [Max] 600 g, Weighing space W×D×H 134×128×80 mm
- Protective working cover included with delivery

Quantity scale KERN IFS

- The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge) KERN CCA. In this way even the smallest of parts can be counted in large volumes
- Tough industry standard suitable for use in harsh industrial applications
- Ergonomic display device with large keypad and high-contrast LCD display for easy entry and reading of, e.g., tare weights, reference weights, limit values etc.
- Three displays for weight display, reference weight, total pieces
- 100 item memories for master data such as reference weight, reference quantity, container weight (PRE-TARE) etc.
- Precise counting: The manual reference weight optimisation gradually improves the average value of the piece weight
- Totalising of pieces when counting
- Printout with date and time
- Aluminium singlepoint load cell (1×3000 e), protection against dust and water splashes IP65
- Protective working cover included with delivery

Counting system KERN CCA



Technical data

Reference scale KERN EWJ

- Overall dimensions
[Max] 600 g: 220×340×180 mm (incl. draught shield)
[Max] 6000 g: 220×315×90 mm
- Dimensions of weighing surface, stainless steel
[Max] 600 g: \varnothing 120 mm
[Max] 6000 g: B×T 155×145 mm
- Net weight [Max] 600 g: 3,2 kg
[Max] 6000 g: 3,4 kg
- Connection cable approx. 1,5 m

Quantity scale KERN IFS

- Dimensions of weighing plate
 - A** 300×240×110 mm
 - B** 400×300×120 mm
 - C** 500×400×140 mm
 - D** 650×500×140 mm

Accessories

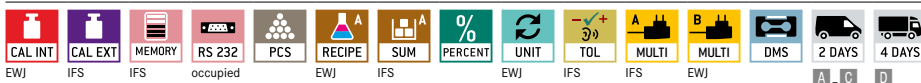
Reference scale KERN EWJ

- **1** Protective working cover, scope of delivery: 5 items, KERN EWJ-A04S05
- **2** Internal rechargeable battery pack, operating time up to 15 h without backlight, charging time approx. 4h, KERN KFB-A01

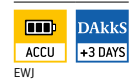
Quantity scale KERN IFS

- **3** Protective working cover, scope of delivery: 5 items, KERN KFB-A02S05
- **4** Stand to elevate display device
Height of stand approx. 330 mm, KERN IFB-A01
Height of stand approx. 600 mm, for models with weighing plate size **C**, **D**, KERN IFB-A02
- **2** Internal rechargeable battery pack, operating time up to 18 h without backlight, charging time approx. 12 h, Factory Option, KERN KFB-A01
- **5** Signal lamp for visual support of weighing with tolerance range, only in combination with CCA-A02, KERN CFS-A03
- Y-cable, RS-232, KERN CCA-A01
- Further details, plenty of further accessories and suitable printers see *Accessories*

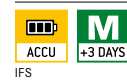
STANDARD



OPTION



FACTORY



Model	Weighing capacity Quantity scale [Max] kg	Readability Quantity scale [d] g	Weighing plate	Weighing capacity Reference scale [Max] g	Readability Reference scale [d] g	Counting resolution Points	Smallest part weight [Normal] g/piece	Option	
								Verification	M
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.									
CCA 6K-5M	3 6	1 2	A	600	0,01	30.000	0,2		965-228-216
CCA 6K-4M <small>NEW</small>	3 6	1 2	A	6000	0,1	30.000	0,2		965-228-217
CCA 10K-5M	6 15	2 5	A	600	0,01	75.000	0,2		965-228-216
CCA 10K-4M <small>NEW</small>	6 15	2 5	A	6000	0,1	75.000	0,2		965-228-217
CCA 30K-5M	15 30	5 10	B	600	0,01	150.000	0,2		965-228-216
CCA 30K-4M <small>NEW</small>	15 30	5 10	B	6000	0,1	1.500.000	0,2		965-228-217
CCA 60K-5M	30 60	10 20	B	600	0,01	300.000	0,2		965-229-216
CCA 60K-4M <small>NEW</small>	30 60	10 20	B	6000	0,1	3.000.000	0,2		965-229-217
CCA 100K-5M	60 150	20 50	C	600	0,01	750.000	0,2		965-229-216
CCA 100K-4M <small>NEW</small>	60 150	20 50	C	6000	0,1	7.500.000	0,2		965-229-217
CCA 300K-5M	150 300	50 100	D	600	0,01	1.500.000	0,2		965-229-216
CCA 300K-4M <small>NEW</small>	150 300	50 100	D	6000	0,1	15.000.000	0,2		965-229-217

NEW New model



Counting system to count the smallest parts in large quantities, maximum number of parts which can be displayed is 999,999

Features

- The highly accurate KERN CCS counting system can replace a whole range of individual balances, efficiently and at a reasonable price

Reference scale KERN CFS

- This professional counting scale, which can also be used as a stand-alone scale, meets the highest demands for accuracy, weighing capacity and volume of items, by being connected to a high-capacity weighing bridge
- Programmable using numerical key pad:
 - required reference quantity
 - known reference weight
- Three displays for weight display, reference weight, total pieces
- Memory (PLU) for 100 items with additional text, reference weight and tare weight, e.g. of a container
- Fill-to-target function: Target count or target weight can be programmed. When the target weight is reached there is an audible and visual signal
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Protective working cover included with delivery

Quantity scale KERN

- The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge). In this way even the smallest of parts can be counted in large volumes

KFP-V20 IP67, KFU-V20

- Stainless steel weighing plate, painted steel base, for models with weighing plate size **A-E**
- Aluminium singlepoint load cell (1×3000 e), protection against dust and water splashes IP65

KFP-V20 IP67, KIP-V20M

- Weighing bridge made of non-slip corrugated steel plate, lacquered, for models with weighing plate size **L-K**
- 4 load cells, steel, silicone-coated, IP67

KFU-V20

- Load range: painted steel
- 4 load cells, alloy steel, silicone-coated, IP67



Technical data

Reference scale KERN CFS

- Overall dimensions W×D×H 315×350×180 mm
- Dimensions weighing surface, stainless steel
 - 1 CFS 300-3: \varnothing 80 mm
 - CFS 3K-5, CFS 6K0.1: W×D 295×225 mm
- Draught shield standard for models with weighing plate size \varnothing 80 mm, weighing space B×T×H 158×143×64 mm
- Net weight approx. 2,6 kg

Quantity platforms, KERN KFP-V20 IP65

- Weighing plate dimensions W×D×H, stainless steel
 - A 230×230×110 mm
 - B 300×240×110 mm
 - C 400×300×125 mm
 - D 500×400×137 mm
 - E 650×500×135 mm

Bulk weighing bridges, KFP-V20 IP67

- Weighing plate dimensions W×D×H, steel, painted
 - F 1500×1250×80 mm

Bulk pallet load handling, KERN KFU-V20

- Weighing plate dimensions W×D×H, steel, painted
 - G 840×1300×90 mm

Quantity platforms KERN KIP-V20

- Weighing plate dimensions W×D×H, stainless steel
 - H 1000×1000×108 mm
 - I 1500×1200×108 mm
 - J 1500×1500×108 mm

- Connection cable approx.
 - A-E 2,5 m
 - F-J 5 m

Accessories

- 2 Protective working cover, scope of delivery: 5 items, KERN CFS-A02S05
- 3 Internal rechargeable battery pack, operating time up to 60 h without backlight, charging time approx. 12 h, KERN GAB-A04
- 4 Signal lamp for visual support of weighing with tolerance range, only in combination with, KERN CFS-A03
- 5 Y-cable for parallel connection of two terminal devices to the RS-232 interface on the scale, e.g. signal lamp and printer, KERN CFS-A04
- Further details, plenty of further accessories and suitable printers see *Accessories*

Information on other high-capacity bulk balances, such as, for example, pallet scales, drive-through scales or floor scales is available on request, for information on other counting systems with the KERN CFS reference balance (d = 0.1 g), please refer to the website

STANDARD



OPTION



Model	Weighing capacity Quantity scale [Max] kg	Readability Quantity scale [d] g	Weighing plate	Weighing capacity Reference scale [Max] g	Readability Reference scale [d] g	Counting resolution Points	Smallest part weight [Normal] g/piece	Option	
								DAKKS	Calibr. Certificate
KERN									
CCS 6K-6	6	0,2	A	300	0,001	1.200.000	0,05	962-128-127	
CCS 10K-6.	15	0,5	B	300	0,001	3.000.000	0,05	962-128-127	
CCS 30K0.01.	30	1	C	3000	0,01	600.000	0,5	962-128-127	
CCS 30K0.1.	30	1	C	6000	0,1	300.000	1	962-128-128	
CCS 60K0.01.	60	2	C	3000	0,01	1.200.000	0,5	962-129-127	
CCS 60K0.01L.	60	2	D	3000	0,01	1.200.000	0,5	962-129-127	
CCS 60K0.1.	60	2	C	6000	0,1	600.000	1	962-129-128	
CCS 60K0.1L.	60	2	D	6000	0,1	600.000	1	962-129-128	
CCS 150K0.01	150	5	D	3000	0,01	3.000.000	0,5	962-129-127	
CCS 150K0.01L	150	5	E	3000	0,01	3.000.000	0,5	962-129-127	
CCS 150K0.1.	150	5	D	6000	0,1	1.500.000	1	962-129-128	
CCS 150K0.1L	150	5	E	6000	0,1	1.500.000	1	962-129-128	
CCS 300K0.01	300	10	E	3000	0,01	6.000.000	0,5	962-129-127	
CCS 300K0.1	300	10	E	6000	0,1	3.000.000	1	962-129-128	
CCS 600K-1S*	600	200	H	6000	0,1	6.000.000	1	962-130-127	
CCS 600K-1*	600	200	I	6000	0,1	6.000.000	1	962-130-127	
CCS 600K-2U*	600	200	G	3000	0,01	12.000.000	0,5	962-130-127	
CCS 1T-4S*	1500	500	H	6000	0,1	15.000.000	1	962-130-128	
CCS 1T-4*	1500	500	I	6000	0,1	15.000.000	1	962-130-128	
CCS 1T-1L*	1500	500	F	6000	0,1	15.000.000	1	962-130-128	
CCS 1T-1U*	1500	500	G	6000	0,1	15.000.000	1	962-130-128	
CCS 3T-3*	3000	1000	I	6000	0,1	30.000.000	1	962-132-128	
CCS 3T-3L*	3000	1000	J	6000	0,1	30.000.000	1	962-132-128	



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