BOSCH
Invented for life

Driven by
ANALYSES

Precise analysis
with exhaust gas measurement units from Bosch

Emission analysis for future-ready exhaust gas testing

Modern vehicles with gasoline and diesel engines provide mobility for the people and goods of today – and tomorrow. For sustainable environmental protection efforts involving the steady reduction of emissions, technological innovations in touch with current trends are essential.

An important contribution is made by precise emission measurements and adjustments happening every day. This is highly relevant for workshops and inspection organizations.

Measurement, diagnosis or testing: Bosch provides you with a complete range of offerings from basic emissions testing to sophisticated emission system analysis. The various measurement modules allow you to carry out fast and precise emission measurements on passenger cars, motorcycles, commercial vehicles and buses. This helps carry out emissions tests more efficiently.

Bosch exhaust gas measurement systems: the right fit for any workshop profile

▶ **BEA 950 S1 UNI:** the premium exhaust gas station for the highest demands

▶ **BEA 950 S2 UNI:** the all-round exhaust gas station for universal use

▶ **BEA 550 UNI:** mobile emissions diagnosis for variable testing demands

▶ **BEA 750 UNI:** new technology combined with proven engineering

▶ **BEA 030 und 040:** reliable rotational speed and temperature measurement

▶ **BEA PC Software:** efficient networking with asanetwork, BNet, Connected Repair, AU Plus

BEA 950 S1 UNI: the premium exhaust gas station for the highest demands

The user-friendly exhaust gas measurement system BEA 950 S1 UNI offers everything needed to quickly and cost-effectively test gasoline, gas and diesel vehicles. It is the perfect solution to current and future demands of workshops.

All measurement modules, control unit testers (optional), PC, 19" monitor, keyboard (optional) and A4 printer come in a compact package in a trolley. To make the system even more future-ready, supplementary options

from the Bosch FSA device range including control unit diagnosis, troubleshooting instructions and vehicle system analysis are available.

Thanks to its sturdy construction, the BEA 950 S1 UNI is well-equipped for tough everyday workshop use.

In short, it is a premium solution designed for more efficient working processes, satisfying even the highest demands.

BEA 950 S1 UNI order number: 0 684 120 360

The system includes:

▶ 4/5 gas measurement module (BEA 055) (CO, CO_2, HC, O_2, NO option)

▶ Smoke opacity measurement module (BEA 070) with Bluetooth, option: battery and charging station

▶ Rotational speed measurement module (BEA 030) with Bluetooth (B+/B-, TN/TD, temperature (optional))

▶ PC, monitor, A4 color printer

▶ Remote control

▶ BEA PC UNI software

BEA 950 S1 UNI benefits at a glance

▶ Premium emissions test station for demanding workshops

▶ Premium trolley with room for all the measuring components

▶ Ideally suited to workshop use thanks to its sturdy construction

▶ Great usability due to radio connection between PC, BEA 070, BEA 030 and KTS 5XX

▶ Optional battery operation with the BEA 070

▶ Quickly readied for use thanks to short setup and warmup times

▶ System can be rounded off by control unit diagnosis, ESI[tronic] troubleshooting instructions and FSA vehicle system analysis options

▶ Supports the Bosch workshop networking concept Connected Repair

BEA 950 S2 UNI: all-round exhaust gas station for universal use

From simple exhaust gas tests to demanding emission system analyses, the BEA 950 S2 UNI is perfectly tailored to everyday workshop operations and simplifies emission measurements.

The powerful all-round solution BEA 950 S2 UNI shows its strengths particularly in everyday testing procedures. It can be comfortably connected to an existing DCU 100 or laptop by radio and boasts easy and fast usability.

With BEA 950 S2 UNI, you get a comfortable all-round solution for all typical workshop duties involving the testing and adjustment of emission values for gasoline, gas and diesel vehicles.

**BEA 950 S2 UNI oder number:
0 684 120 359**

The system includes:

▶ 4/5 gas measurement module (BEA 055) (CO, CO_2, HC, O_2, NO option)

▶ Smoke opacity measurement module (BEA 070) with Bluetooth, option: battery and charging station

▶ Rotational speed measurement module (BEA 030) with Bluetooth (B+/B-, TN/TD, temperature (optional))

▶ A4 color printer

▶ DCU 100/laptop[1]

▶ BEA PC UNI software

BEA 950 S2 UNI benefits at a glance

▶ Ease of use in connection with DCU 100 or any commercially available laptop or netbook

▶ Generous laptop shelf on the trolley

▶ All cables for DCU 100/laptop included

▶ Ideally suited to workshop use thanks to its sturdy construction

▶ Quickly readied for use thanks to short setup and warmup times

▶ User-friendly due to wireless radio connection between DCU 100 / laptop, BEA 070, BEA 030 and KTS 5XX

▶ System can be rounded off by control unit diagnosis, ESI[tronic] troubleshooting instructions and FSA vehicle system analysis options

▶ Space-saving – all measurement components are stored in the trolley

[1] Not included in the scope of delivery.

BEA 030 and BEA 040: reliable rotational speed and temperature measurement

BEA 030:

The BEA 030 is a practical module for quick and easy engine speed measurement via B+/B- and TN/TD and for reading oil temperature.

BEA 030 order number: 0 684 440 000

Technical data	BEA 030
Dimensions (W x D x H)	17 x 12 x 3.5 cm
Weight	0.35 kg
Power supply unit operating voltage	100–240 V, 50–60 Hz
Operating temperature	5 °C to 45 °C

Designation	Measuring range	Resolution
Battery voltage	9 to 32 V	0.1 V
Oil temperature	-20 °C to 150 °C	0.16 °C
B+/B-	450 to 9,500 rpm	20 rpm
TN/TD	100 to 12,000 rpm	10 rpm

BEA 040:

The BEA 040 is a measurement module for quick engine speed measurement by way of structure-borne and airborne noise from the engine.

BEA 040 order number: 1 687 023 673

Technical data	BEA 040
Dimensions (W x D x H)	22.5 x 18.5 x 5 cm
Weight	approx. 0.8 kg
Power supply unit operating voltage	230 VAC / 50 Hz via 12 VDC or power supply via OBD interface
Operating temperature	5 °C to 45 °C

Designation	Measuring range
Diesel engine speed	400 to 9,500 rpm
Diesel engine speed	400 to 8,000 rpm

BEA 030 features at a glance

- ▶ Operation from a PC via Bluetooth or USB
- ▶ BEA 040 connection
- ▶ Voltage supply for BEA 040
- ▶ BEA 040 readings transmission to PC

BEA 040 features at a glance

- ▶ Time-saving when used with both passenger car and commercial vehicle engines thanks to easy adaptation
- ▶ Engine speed measurement of diesel and gasoline engines
- ▶ Efficient: no need to lower the cab on commercial vehicles

BEA 550 UNI benefits at a glance

▶ Ideal for mobile emissions testing, especially for inspection organizations

▶ Great usability due to radio connection between DCU 100 / laptop, BEA 070, BEA 030 and KTS 5XX

▶ Ease of use in connection with DCU 100 or any commercially available laptop/netbook

▶ Flexibility thanks to compact and portable measurement modules

▶ Battery operation of BEA 070 (optional)

BEA 550 UNI: mobile emissions diagnosis for variable testing demands

The portable exhaust gas measurement system BEA 550 UNI was specially developed for mobile emissions testing and offers all the tools needed to meet the specific demands of inspection organizations.

In both mobile and workshop use, its wireless radio and battery technology help the system get ready for use quickly to conduct precise examinations of and adjustments to gasoline, gas and diesel vehicles.

This is what makes the BEA 550 UNI with its compact shape and low weight – at full performance – a perfect companion for flexible inspection work.

BEA 550 Combi UNI

▶ 4/5 gas measurement module (BEA 060) (CO, CO_2, HC, O_2, NO option)

▶ Smoke opacity measurement module (BEA 070) with Bluetooth, option: battery and charging station

▶ Rotational speed measurement module (BEA 030) with Bluetooth (B+/B-, TN/TD, temperature (optional))

▶ BEA PC UNI software

▶ Accessory case

🛒 **BEA 550 Combi UNI order number: 0 684 105 506**

BEA 550 Diesel UNI

▶ Smoke opacity measurement module (BEA 070) with Bluetooth, option: battery and charging station

▶ Rotational speed measurement module (BEA 030) Bluetooth (B+/B-, TN/TD, temperature (optional))

▶ BEA PC UNI software

▶ Accessory case

🛒 **BEA 550 Diesel UNI order number: 0 684 105 179**

BEA 550 Gasoline UNI

▶ 4/5 gas measurement module (BEA 060) (CO, CO_2, HC, O_2, NO option)

▶ Rotational speed measurement module (BEA 030) with Bluetooth (B+/B-, TN/TD, temperature, optional)

▶ BEA PC UNI software

▶ Accessory case

🛒 **BEA 550 Gasoline UNI order number: 0 684 105 279**

BEA 060 UNI

▶ 4/5 gas measurement module (BEA 060) (CO, CO_2, HC, O_2, NO option)

▶ BEA PC UNI software

🛒 **BEA 060 UNI order number: 0 684 105 288**

BEA 750 UNI: new technology combined with proven engineering

No one knows more about the special needs of workshops than the people working in one. That is why the BEA 750 UNI was developed in a collaboration with mechanics and optimized for everyday workshop use.

The closed system with its high-value components – such as the SSD drive or the fi ne-resolution touchscreen – shows the current state of the engineering.

The BEA 750 UNI exhaust gas measurement system by Bosch is especially ergonomic to use and off ers all the tools needed to inspect gasoline, gas and diesel vehicles quickly and easily.

BEA 750 Combi UNI order number:
0 684 750 304

BEA 750 Gasoline UNI order number:
0 684 750 204

BEA 750 Combi UNI

▶ Main unit incl. 4/5 gas measurement module for gasoline vehicles (BEA 065: CO, CO_2, HC, O_2, NO option), smoke opactiy measurement module for diesel vehicles (BEA 070) and trolley

▶ Touchscreen monitor and thermal paper printer

▶ B+/B- connection cable for battery or cigarette lighter socket

▶ WLAN card for A4 printer

▶ Exhaust gas sampling probes and hoses for passenger cars

▶ Remote control

▶ BEA 750 UNI software

BEA 750 Gasoline UNI

▶ Main unit incl. 4/5 gas measurement module for gasoline vehicles (BEA 065: CO, CO_2, HC, O_2, NO option) and trolley

▶ Touchscreen monitor and thermal paper printer

▶ B+/B- connection cable for battery or cigarette lighter socket

▶ WLAN card for A4 printer

▶ Exhaust gas sampling probes and hoses for passenger cars

▶ Remote control

▶ BEA 750 UNI software

BEA 750 UNI benefits at a glance

▶ Modern and ergonomic design

▶ Closed Windows-based system

▶ Optimum cost effectiveness

▶ Preconfigured plug-and-play system

▶ Easy operation

BEA 750 UNI: optimized for everyday workshop

Top

▶ Tray for the OBD module KTS 515

▶ Slot for vehicle registration and clipboard

▶ Tray for touch pen

Printer

▶ Integrated thermal paper printer

▶ Integrated WLAN card for A4 printer

Computer

▶ Integrated Bluetooth

▶ Integrated network card

▶ Integrated HDMI output port

▶ USB ports on the back

▶ Hard drive (SSD)

Rotational speed and temperature measurement

▶ Proven and familiar technology from the engine speed module BEA 030 fitted to the top

▶ Engine speed measurement by means of +/- battery terminals or cigarette lighter socket

▶ BEA 040 (engine speed measurement by means of structure-borne or airborne noise signal) available as optional accessories

Opacimeter

Familiar smoke opacity measurement module BEA 070

Remote control

Monitor

10" capacitive touchscreen

Four-gas meter

Technology from the proven 4/5 gas measurement module BEA 055

Software

▶ New BEA 750 UNI-software

▶ Improved configuration, e.g. Bluetooth setup
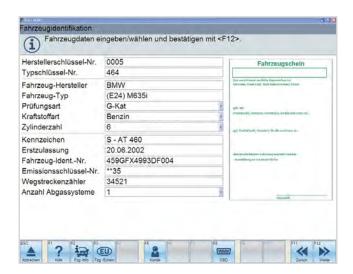
Trolley

Modern and ergonomic

BEA PC Software: efficient networking with asanetwork, BNet, Connected Repair, AU Plus

For fast data exchange – BEA PC software

We have made it our goal to make legally required emissions tests even faster and more cost-effective. The result: BEA PC software by Bosch.
Fully automatic test sequences, simple operation with an intuitive user interface and networking options enable you to perform even faster and more cost-effective emissions testing in the future.

Bosch test equipment, networked by asanetwork

Asanetwork connects the entire test equipment to the rest of the workshop. All information collected from the job order, the workshop itself and centralized database storage is available anytime at all working stations. When a new order is created in the system, the exhaust gas analyzer receives the job information automatically.

Compatible with Beissbarth software – BNet

The BEA PC software can be connected to BNet, the network technology by Beissbarth GmbH.

Intelligent integration – Connected Repair

Under the name Connected Repair, Bosch offers a server-based software solution. The central communication platform simplifies and accelerates work processes on all devices connected. Customer and vehicle data as well as job orders and measurement results are available at all times from a centralized database to all work stations connected. Once entered, all information can be retrieved as needed.

Your benefits at a glance

- ▶ Transparent vehicle and costumer information at a glance
- ▶ Asanetwork, BNet and Connected Repair networking
- ▶ User-friendly and intuitive operation

- ▶ Automatic and fast test sequences
- ▶ Networking of diagnostic devices for more efficient workshop processes

Minimum requirements for laptops or notebooks running the BEA PC software

- ▶ Min. 2-GHz CPU or 1.6-GHz dual core
- ▶ Min. 2 GB of RAM
- ▶ Windows 7 operating system or newer

- ▶ Min. 160 GB of hard drive space
- ▶ 2 free USB ports
- ▶ **Adaptation options:** BEA PC software can also be used with the DCU 100 and DCU 220

The right solution for any need

Scope of delivery	BEA 950 S1 UNI	BEA 950 S2 UNI	BEA 750 Combi UNI
Order number	0 684 120 360	0 684 120 359	0 684 750 304
BEA 030	x	x	1)
Four-gas meter	x	x	x
BEA 060			
BEA 070	x	x	x
Premium trolley	x		
Medium trolley		x	
BEA 750 trolley			x
PC, monitor, keyboard, mouse	x		
A4 color printer	x	x	
Strip printer			x
KTS 560			
KTS 515			
BEA 040			
Remote control	x		x
BEA PC UNI or BEA 750 UNI software	x	x	x

Scope of delivery	BEA 750 Gasoline UNI	BEA 550 Combi S2	BEA 550 Gasoline UNI	BEA 550 Diesel UNI	BEA 060 UNI
Order number	0 684 750 204	0 684 105 506	0 684 105 279	0 684 105 179	0 684 105 288
BEA 030	1)	x	x	x	
Four-gas meter	x				
BEA 060		x	x		x
BEA 070		x		x	
Premium trolley					
Medium trolley					
BEA 750 trolley	x				
PC, monitor, keyboard, mouse					
A4 color printer					
Strip printer	x				
KTS 560					
KTS 515					
BEA 040					
Remote control	x				
BEA PC UNI or BEA 750 UNI software	x	x	x	x	x

1 Built-in BEA 030 rotational speed technology

Technical data overview

BEA 950 S1 UNI

Technical data	BEA 950 S1/S2
Dimensions (H x W x D)	178 x 68 x 80 cm
Weight	110 kg
Operating temperature	5 °C – 45 °C

BEA 950 S2 UNI

Technical data	BEA 950 S3/S4
Dimensions (H x W x D)	135 x 68 x 80 cm
Weight	95 kg
Operating temperature	5 °C to 45 °C

BEA 060

Technical data	BEA 060
Dimensions (W x H x D)	414 x 330 x 280 mm
Weight	approx. 10 kg
Power supply unit operating voltage	100–240 V, 50–60 Hz
Operating temperature	5 °C to 45 °C

BEA 070

Technical data	BEA 070
Dimensions (W x H x D)	414 x 330 x 280 mm
Weight	approx. 10 kg
Power supply unit operating voltage	100–240 V, 50–60 Hz
Operating temperature	5 °C to 45 °C
Exhaust gas sampling probe maximum temperature	250 °C
Measurement input maximum temperature	200 °C

BEA 060/065

Designation	Measuring range	Resolution
CO	0–10 vol%	0.001 vol%
CO_2	0–18 vol%	0.010 vol%
HC	0–9,999 ppm	1.0 ppm
O_2	0–22 vol%	0.010 vol%
NO	0–5,000 ppm	1.0 ppm
Lambda	0.5–1.8	0.001
COvrai	0–10 vol%	0.010 vol%

Sensor	Measuring range	Resolution
Opacity	0–100%	0.1%
Absorption coefficient	0–10 m^{-1}	0.01 min^{-1}

BEA 750

Technical data	BEA 750
Dimensions (H x W x D)	160 x 80 x 70 cm
Weight	70 kg - BEA 750 Kombi 60 kg - BEA 750 Otto
Operating temperature	5 °C to 45 °C

Rotational speed measuring technology

Designation	Measuring range	Resolution
Battery voltage	9–32 V	0.1 V
Oil temperature	-20 °C to 150 °C	0.16 °C
B+/B-	450 to 9,500 rpm	20 rpm
TN/TD	100 to 12,000 rpm	10 rpm

Accuracy classes and approvals

▸ OIML class 0

▸ MID (Measuring Instruments Directive)

Special accessories

Special accessories specifically for BEA 750

Keyboard

🛒 **1 687 023 810 DE**
　　1 687 023 840 CZ
　　1 687 023 835 FI/SE
　　1 687 023 839 FI/SE
　　1 687 023 838 NL
　　1 687 023 841 PL
　　1 687 023 833 GB

Keyboard tray

🛒 **1 685 438 658**

TN/TD rotational speed line
L = 4 m

🛒 **1 684 460 292**

Mounting for BEA 040

🛒 **1 681 332 332**

Cover

🛒 **1 685 439 535**

Diesel extension set

🛒 **1 687 001 989**

Special accessories for 4/5 gas and temperature measurement

Connection cable (2 m)
for BEA 060 to cigarette
lighter socket

🛒 **1 684 465 584**

NO extension set

🛒 **1 687 001 972**

Silicon hose extension set
for 2-stroke engines

🛒 **1 687 001 283**

Active carbon filter

🛒 **1 687 432 014**

Gasoline passenger car
exhaust gas sampling probe
(part load up to 500 °C)

🛒 **1 680 790 052**

Probe sealing for leak test

🛒 **1 680 706 040**

Temperature
measurement probes

🛒 **see table**

Probe	Cable length	Probe length	Comments
1 687 230 068	120 cm	90 cm	Passenger cars
1 687 230 036	300 cm	90 cm	Passenger cars
1 687 230 042	600 cm	90 cm	Passenger cars
1 687 230 045	600 cm	150 cm	Commercial vehicles
1 687 230 051	10 m	150 cm	Commercial vehicles, buses
1 687 230 050	600 cm	210 cm	Commercial vehicles, buses

Special accessories for smoke opacity measurement

Passenger car full-load exhaust gas sampling probe for BEA 070 (measurement at the performance/engine test bench)

📋 **1 680 790 046**

Commercial-vehicle exhaust gas sampling probe for BEA 070

📋 **1 680 790 041**

Exhaust gas sampling hose (BEA 070) for commercial-vehicle exhaust gas sampling hose (1 m)

📋 **1 680 712 195**

Exhaust gas sampling hose (BEA 070) for commercial-vehicle exhaust gas sampling probe (3.5 m)

📋 **1 680 712 201**

Heated exhaust gas sampling hose (BEA 070) for commercial-vehicle probe (5 m)

📋 **1 685 510 232**

Clamping fixture with telescopic rod for BEA 070 (for commercial vehicles with an elevated exhaust)

📋 **1 688 040 258**

Battery extension set for BEA 070

📋 **1 687 001 626**

Charging station for BEA 070 battery

📋 **1 687 023 619**

Diesel extension set for BEA 550 Otto to BEA 550 Kombi

📋 **1 687 001 976**

Special accessories for professional emissions analysis and OBD

KTS 515 – OBD module

📋 **0 684 400 515**

KTS 560 – control unit diagnosis with 1-channel multimeter

📋 **0 684 400 560**

KTS 590 – control unit diagnosis with 2-channel multimeter/2-channel oscilloscope

📋 **0 684 400 590**

OBD adapter box with OBD interface

📋 **1 684 462 514**

Wall mounting for BEA 060 or BEA 070

📋 **1 687 001 973**

BEA 040

📋 **1 687 023 673**

BEA 040 connection cable to BEA 030 and BEA 060

📋 **1 684 463 810**

Remote control

📋 **1 687 201 985**

Trolley for BEA 550

📋 **1 688 003 255**

Test cable case

📋 **1 687 011 208**

Driven by efficiency

Bosch technologies are used worldwide in almost all vehicles.
People, and assuring their mobility, is what we are focused on.

Therefore, we have dedicated the last 125 years of pioneering spirit
and expertise in research and manufacturing to achieving this.

We continue to work on our unique combination of solutions for
spare parts, diagnostic devices, workshop equipment and services:

▶ Solutions for efficient vehicle repairs

▶ Innovative workshop equipment and software

▶ The world's most comprehensive range of new and replacement parts

▶ Large network of wholesale customers, for quick and reliable parts supply

▶ Competent hotline support

▶ Comprehensive educational and training offers

▶ Targeted sales and marketing support

Find out more at:
www.bosch-workshop-world.com

**What drives you
drives us.**

AA-AS/MKC F 026 P02 867 2018/08 Subject to technical and program changes.

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