



The Parker Service Master CONNECT

Intuitive operation. Modular system.

Customized solutions. Optimal connections.



ENGINEERING YOUR SUCCESS.

The Parker Service Master CONNECT –

Modular system due to individual interchangeable measuring modules

Variable measuring inputs:
Parker analog and CAN sensors with sensor recognition, analog sensors, SAEJ-1939, CANopen and frequency

Automatic recording and saving of measurement data and immediate analyzing with the tried-and-tested SensoWin® software on a PC

Measure and display up to 100 channels

Intuitive operation using the colored 7" touch display

Variety of measuring methods, i. a.:

- Start/Stop
- Data logger with ring memory
- Point measurement
- Trigger
- Trigger logic
- Fast measurements

Intuitive user interface, can be extended by customer-specific software applications

Measured value representations:

- Numerical
- Bar graph
- Pointer
- Curve



Advantages that connect.



Integrated web server
for remote control
applications

Pressure, temperature,
flow, rpm and frequency,
etc. – everything is
measured, saved,
monitored and analyzed

Large internal data logger

Push button for
screen shots

Varied connections:
– WLAN
– Bluetooth LE
– LTE*

* in preparation



**Universally applicable
for mobile and stationary
applications.**

A strong diagnosis measuring
device for many applications due
to the modularly structured sys-
tem in the hardware and software.

Can be flexibly used in hydraulics
thanks to the wide range of
sensors. For example, for service,
commissioning, research and
development.

Strong design, durable and easy to operate

Highly protected against moisture and dust, protection class IP 65

Illuminated and anti-glare color display for good readability in all situations, 7 inches in size for a clear overview of comprehensive information

Rugged, oil-resistant protection for use in harsh conditions and for shock absorption

Parker The Parker Service Master CONNECT



Suitable for use with gloves, robust 3 mm glass, resolution 800 x 480 pixels

ate.



**Integrated bracket
for carry strap**

**Additional large tactile
keyboard to ensure
operation even in
adverse conditions**

**Intuitive operation
thanks to clear icons and
functional keys and apps**



Easy and practical to use.

Not only for universal application, but also universal handling. The Parker Service Master CONNECT has diverse adaptation capabilities prepared: A stand on the back, VESA-standard connection for wall mounting and a carrying strap for "man-carried" use.

Everything is intuitively possible and me

Power supply with universal country adapters, strong battery power and fast charge time, energy saving options for long operating times

Analog input module for connection with Parker sensors with sensor recognition

Analog auxiliary sensors - also with high-speed feature

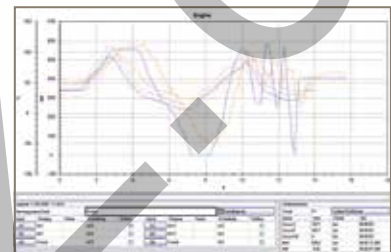
2 x CAN-BUS networks with up to 24 channels each

2 frequency inputs or D-IN/D-OUT

Sim card slot

asurable.

CAN module for monitoring CAN systems or also for connecting auxiliary CAN sensors



We are in touch with technology

With the The Parker Service Master CONNECT, we make work environments a little bit easier and more manageable. Never before has it been so easy to measure, display and analyze complex operations. Specially developed Parker sensors enable the automatic sensor recognition and the Plug & Play solution. Don't wait – start right away!

The tried-and-tested software SensoWin® is included in the delivery. With that, measurements are analyzed and test reports are easily prepared.

LAN interface for remote monitoring, transmission of measured values or remote control

USB host interface for connection with USB mass storage.

USB device interface for connection with PC, Laptop etc.

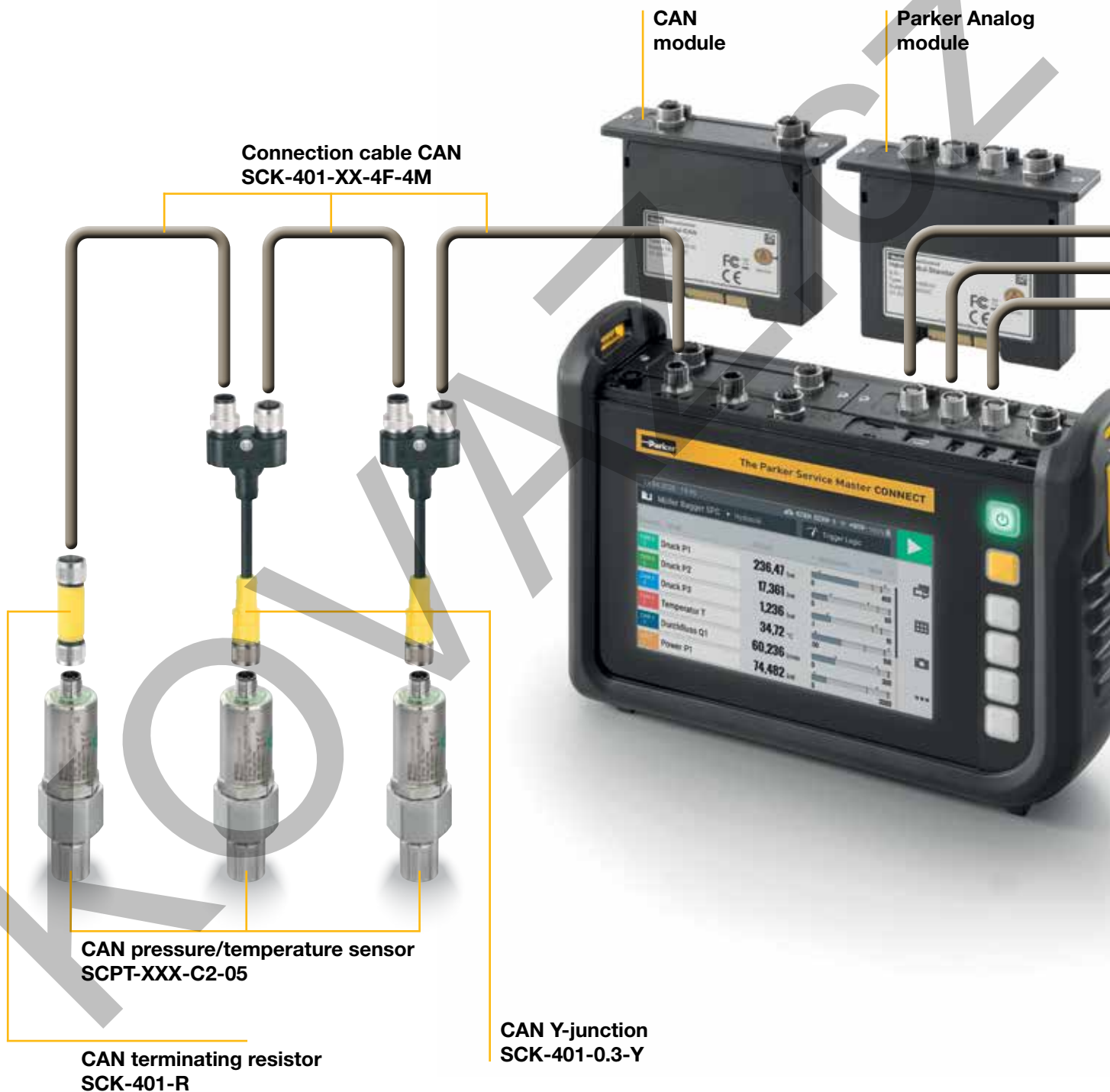
ENGINEERING YOUR SUCCESS.

The connection artist is at home on many

Parker CAN bus sensors

Up to 24 channels are connected via one bus cable to the measuring device.

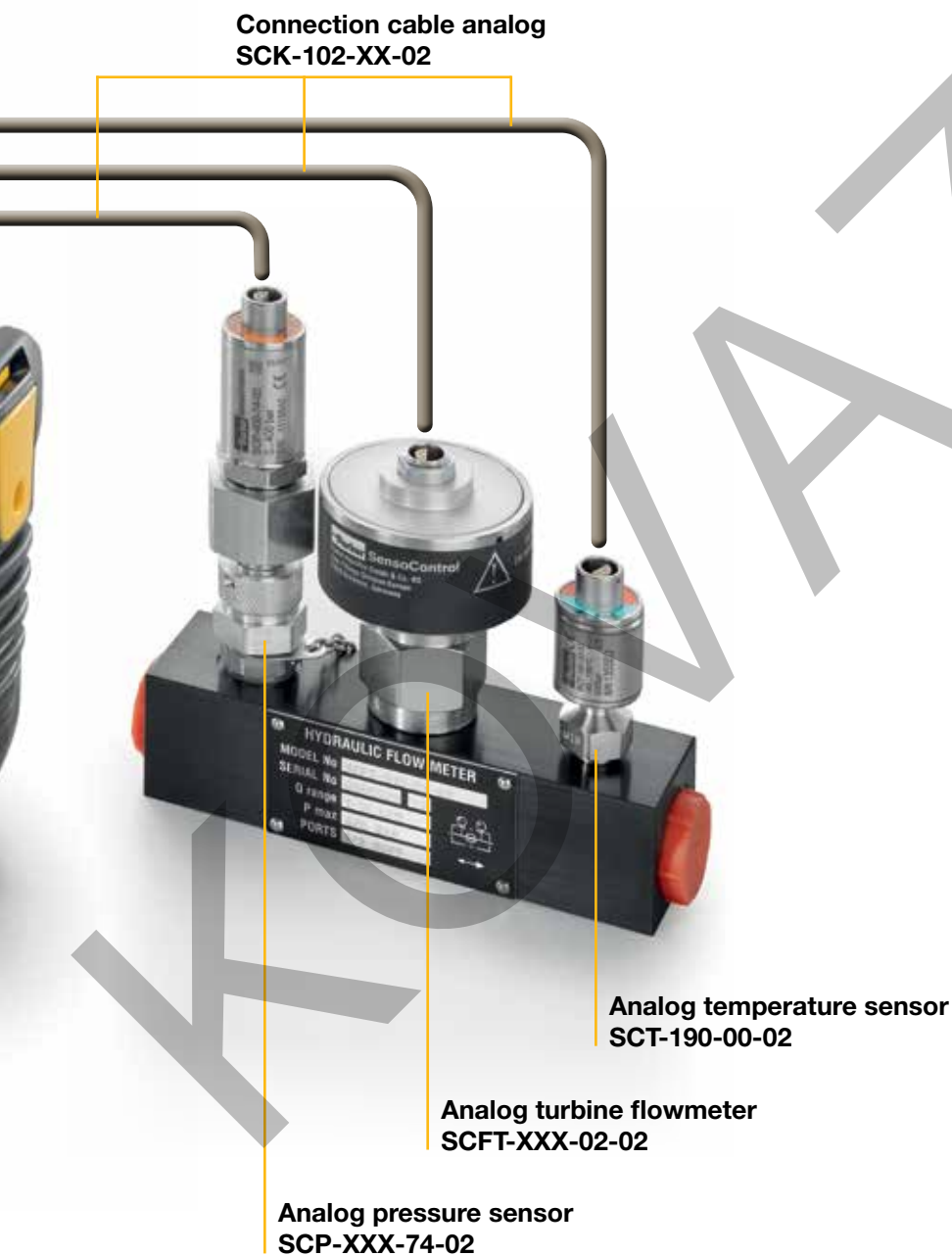
Further modules are in preparation, customer-specific solutions are possible.



y stages.

Analog sensors

The analog sensors are separately and directly connected to the measuring device.



Lighthouse with exemplary function.

The measurement device can process different electrical signals. In the range of the CAN bus technology the following sensors can be connected.

Parker CAN sensors with integrated sensor recognition. After plug in, manual parameterizing of the measurement signal and measuring range is no longer necessary – independent if pressure, temperature, flow or rpm sensors.

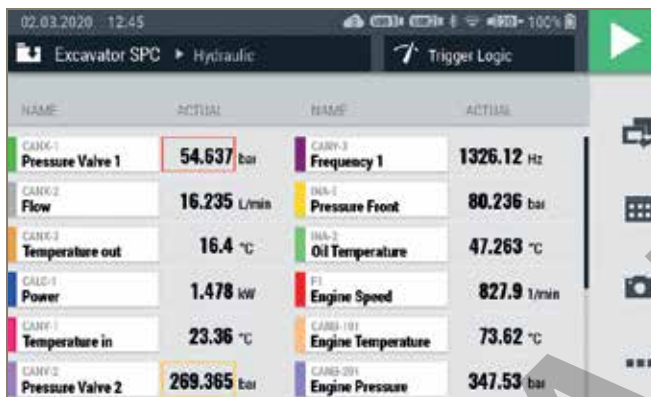
Connection of standard CAN sensors, which are supplied and processed independently by the measuring device.

Communication with a CAN system for so-called “listening”, i. e. to display and further process measurement values without interfering directly with the bus controller.

An optional CAN monitor assists during installation of CAN channels and analysis of CAN bus reports.

Evident: A large display for the smallest

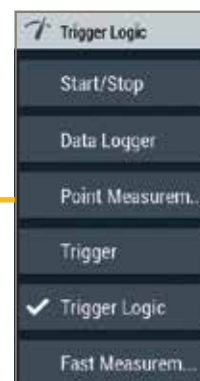
- Up to 12 channels in one display
- Color allocation of the individual channels
- Display can be changed between ACT, MIN and MAX values



- Up to 8 freely selectable channels simultaneously in one curve display
- Choice between ACT and MIN/MAX value presentation
- Free scalability
- For analysis purposes, up to two cursors with measured value and delta display could be inserted



- Numerical display of 6 channels with bar graph
- Display of measuring range, warning and alarm values and min. and max. values



- Variety of measurement possibilities for different applications

values.

- Recurring measuring tasks can easily be saved as a template
- When choosing the template, the preset measurement set up is also compared
- Using a template, ensures the comparability of the measurements.
- A current template can be duplicated and modified as needed

06/04/2020 17:34

Reassign channel

| CH | NAME | NOMINAL CH | ACTUAL CH | STATE |
|--------|----------------|---------------------------------|---------------------------------|-------|
| CANX-3 | Pressure 1 | 0 - 60 bar S/N 1204010467 | 0 - 60 bar S/N 1204010467 | OK |
| CANX-3 | Pressure 2 | 0 - 600 bar S/N 1345130623 | 0 - 600 bar S/N 1345130623 | OK |
| CANX-3 | Pressure 3 | 0 - 150 bar S/N 1204010919 | 0 - 150 bar S/N 1204010919 | OK |
| CALC 1 | Delta Pressure | -50 - 150 bar S/N | -50 - 150 bar S/N | OK |
| CANX-9 | Flow | 0 - 600 L/min S/N 1204017305 | 0 - 600 L/min S/N 1204017305 | OK |
| NA-3 | Temperature 1 | -50 - 250 °C S/N | -50 - 250 °C S/N | OK |

26.11.2020 07:00

Edit

Name Formula_01

Formula $(CH1-CH2)*CH3$

Calculator interface showing standard functions (sin, cos, tan, f(x)) and a numeric keypad.

- Up to 4 calculation channels can be set up
- In addition to the predefined standard functions, such as delta values or hydraulic power, also free formulas can be entered

10.12.2020 12:30

Standard

| NAME | TYPE | DATE | SIZE |
|----------------------------|------|------------|--------|
| Drawing SCPT-XXX-C2-05-EMA | png | 20.09.2019 | 130 KB |
| SCJN | pdf | 20.09.2019 | 309 KB |
| USERMANUAL | pdf | 20.09.2019 | 2 MB |
| SCREENSHOT_001 | jpg | 20.09.2019 | 1 MB |
| SCREENSHOT_002 | jpg | 20.09.2019 | 245 KB |

- In addition to measurement data and templates, also images, reports and other documentation files can be managed

Specifications

The Parker Service Master CONNECT

Input/output

CAN sensor input

2 CAN bus networks, 24 Parker CAN bus sensors each. Alternative at CAN Y up to 5 external CANopen sensors. Baudrate at different CAN adjustable. 24 VDC power supply/ max. 250 mA. No mixed mode of Parker-CAN and different CAN within a CAN-Bus section possible. Internal termination impedance 120 Ohm fixed. Supports CAN 2.0 A/CAN 2.0 B. Version SMC-600-LC: max. 20 channels. SMC-600-LC: only predefined calculation channels possible.

Scanning rate
Plug connection
D-IN/OUT F1/2

1 ms = 1.000 measurement value/s
M12x1, 5 pin with SPEEDCON®, connection plug dual-function input, which can be used either as DIGITAL-IN or DIGITAL-OUT, or through a changeover, two frequency inputs are made available. Also possible as recognition of rotation direction.

Connection
Input
Supply
Input signals
Gauge/level
Precision
Module slots
Touch display

M12x1 SpeedCon female. (5 pin)
galvanic separated
24 V DC, 80 mA
Frequency (0 Hz ... 20 KHz)
Activ low: 0-1.4 V, Activ high: 3-30 V
 $\pm 0,1\%$
2, for input module, flexible placement possible
7" color graphic display, 800 x 480 pixels

Calculation channels

Quantity
Functions
Max. offsettings of channels/
Calc-channels

4
/, *, +, -, f(t), Integral, sin, cos, tan, x^2 , SQRT, x^y
3

Ports

USB device
USB host 1
USB host 2
Memory
LAN
SIM card
Wireless communication

data transmission between device and PC
connection with external storage media
connection with external storage media
12 GB
connection with network cable
MINI-SIM insert
SMC-600-00: WLAN, Bluetooth LE (Europe)

Ambient conditions

Ambient temperature
Storage temperature
Rel. humidity
Environmental impact test
Vibration
Protection class
External power supply
Connection

-10...+50 °C
-20...+60 °C
< 80 %
Drop test 1 m (EN 60721-3-7)
(EN 60721-3-7, 7M3)
IP 65 (EN/IEC 60529:2014)
110/240 VAC - 24 VDC/3.750 mA KFZ charging cable as accessory (12/24 VDC)
3 pin

Battery

Lithium-ion pack, +14.4 VCD/3.250 mAh

Material

Housing
Housing protective cover
Flammability rating
Dimensions (W x H x D)
Weight
VESA connection

ABS/PC (thermoplastic)
TPE (thermoplastic elastomer)
UE94VO
257 mm x 181 mm x 87 mm
1880 g without input modules
100 x 100 mm / M4 metric

Specifications

Input module

SCMI-600-01 Parker analog

| | |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inputs with sensor recognition | 3 sensor inputs (up to 6 analog measurement channels) With sensor recognition (p/T/Q/n) for SensoControl® diagnosis sensors Plug connection: 5 pin, push-pull, combination connector/socket Sampling rate: 1 ms = 1.000 measured values/sec. |
| Working temperature range | -10 °C...+50 °C |
| Storage temperature range | -20 °C...+60 °C |
| Weight | 152 g |
| Inputs for auxiliary sensors | 2 sensor inputs (analog) For measuring power and voltage Scanning rate: 1 ms = 1.000 measured values/sec. Voltage measuring range: -10. . .+10 VDC Current measuring range: 0/4. . .20 mA Supply ext. Sensors: +24 VDC/max. 100 mA Plug connection: M12x1, 5 pin socket FAST-MODE scanning rate: 0/1 ms = 10.000 measured value/s |
| Supply | 24 V DC, 100 mA |
| Input signal range | -10...+10 V 0/4...20 mA |
| Accuracy | ±0.1 % FS |

Input module

SCMI-600-02 CAN

| | |
|---------------------------|-----------------------------------------------------------------------------|
| Connection | 2 x M12 5 pol. female |
| Nomenclature | CAN1xx, CAN2xx, each galvanically separated |
| Kanale CAN1xx | 24 |
| Kanale CAN2xx | 24 |
| Standards | CAN 2.0 A, CAN 2.0 B, |
| Protocol support | CANopen, SAEJ1939 CAN generic, mixed mode of several CAN protocols possible |
| Termination impedance | Attachable/detachable |
| Supply signal connection | Passive, no external supply |
| Working temperature range | -10 °C...+50 °C |
| Storage temperature range | -20 °C...+60 °C |
| Weight | 127 g |

Input modules

SCMI-600-03 Parker analog ISO

Such as SCMI-600-01 Parker analog, but module electronically isolated from device

PC software SensoWin®

- Compatible with Windows 10 (32- and 64-bit)
- Zoom functions
- Conjunction of measurement curves
- Cursor functions
- Export function
- Extensive filter function
- Remote connection/remote control
The Parker Service Master CONNECT
- Freely definable calculation channels
- Online measurement
- Easy operation



General

The PC software SensoWin® is an easy-to-use tool for reading and processing the measurement curves recorded by The Parker Service Master CONNECT.

Functions

The recorded curves can be represented in a diagram. Shifting of the curves allows for accurate analysis of the hydraulics.

A performance curve can be created to evaluate a pump. Pressure losses and leaks are detected by generating the difference values of pressure curves.

With the cursor, a hydraulic procedure can be examined relating to the time. Comprehensive information is available for each curve. That is to say the measurement recorded by The Parker Service Master CONNECT can be reproduced at any time.

Changing the scale factor and units allows for any subsequent adjustment to be shown in a diagram. Smoothing of the

measurement curve and mathematical operations are important functions in the analysis of the hydraulic system.

The date, time, and any notes are documented with each measurement, making subsequent allocation considerably easier. As a result, documentation and certificates can be generated quickly and in a cost-effective way since the PC software SensoWin® can make use of all Windows features and benefits. All measurements can be exported in CSV format.

Current findings (pressure peaks, etc.) are visible during ongoing processes (online function).

Scope of delivery

| | | | | | | | | | |
|-----------------------------------------------------------------------|--|----|------------|--------------------------|----|---|----|---|---|
| The Service Master CONNECT (without input modules) | | x- | SCM-600 | - | xx | | | | |
| The following items are furnished with the device: | | | | | | | | | |
| - Power supply incl. Country adapter | | | | | | | | | |
| - USB 2.0 cable (2 m) | | | | | | | | | |
| - PC software | | | | | | | | | |
| The Service Master CONNECT Kit (without input modules) | | x- | SCKIT-600 | - | xx | | | | |
| Device in trolley bag incl. carry strap | | | | | | | | | |
| 2 x SCK-401-05-4F-4M, 2 x SCK-401-R, | | | | | | | | | |
| 2 x SCA-EMA-3/3, 2 x SMA3-1500 | | | | | | | | | |
| The Service Master CONNECT with input modules | | x- | SCMSET-600 | - | xx | - | x | - | x |
| With calibration certificate according to ISO 9000 | | K- | | | | | | | |
| Instrumentation | | | | | | | | | |
| with WLAN and Bluetooth LE (Europe) / no LTE | | | | | | | 00 | | |
| without WLAN and without Bluetooth | | | | | | | 0A | | |
| Input module 1 | | | | | | | | | |
| Input module Parker Analog SCMI-600-01 | | | | | | | | 1 | |
| Input module CAN SCMI-600-02 | | | | | | | | 2 | |
| Input module Parker Analog ISO (electronically separated) SCMI-600-03 | | | | | | | | 3 | |
| Input module 2 | | | | | | | | | |
| without | | | | | | | | 0 | |
| Input module Parker Analog SCMI-600-01 | | | | | | | | 1 | |
| Input module CAN SCMI-600-02 | | | | | | | | 2 | |
| Input module Parker Analog ISO (electronically separated) SCMI-600-03 | | | | | | | | 3 | |
| Accessories | | | | Order designation | | | | | |
| KFZ charging cable 24 VDC | | | | SCK-318-05-21 | | | | | |
| KFZ charging cable 12 VDC | | | | SCNA-SMC-CAR | | | | | |
| Plug M12x1 for external sensor input | | | | SCK-401-4M | | | | | |
| SMC carry strap | | | | SC-ACC-02 | | | | | |
| LAN-Cable | | | | SCK-318-02-37 | | | | | |
| Power supply incl. adapter (EUR/UK/US/AUS) | | | | SCSN-470 | | | | | |
| Case with Trolley function | | | | SCC-600 | | | | | |
| USB cable | | | | SCK-315-02-35 | | | | | |

Subject to alteration.



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US Product Information Centre

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