# A new digital telemetry:
# $D^x$ - Telemetry

Confidence by Experience

# Signal Conditioning and Transmitter Unit
# $D^x$-SCT (rotor electronic)


Testrig application

6 channels (+ 1 temp.)
per transmitter
Strain gauge, thermo
or analogue inputs,
free programmable,
Temperature range:
-40°C … +85°C


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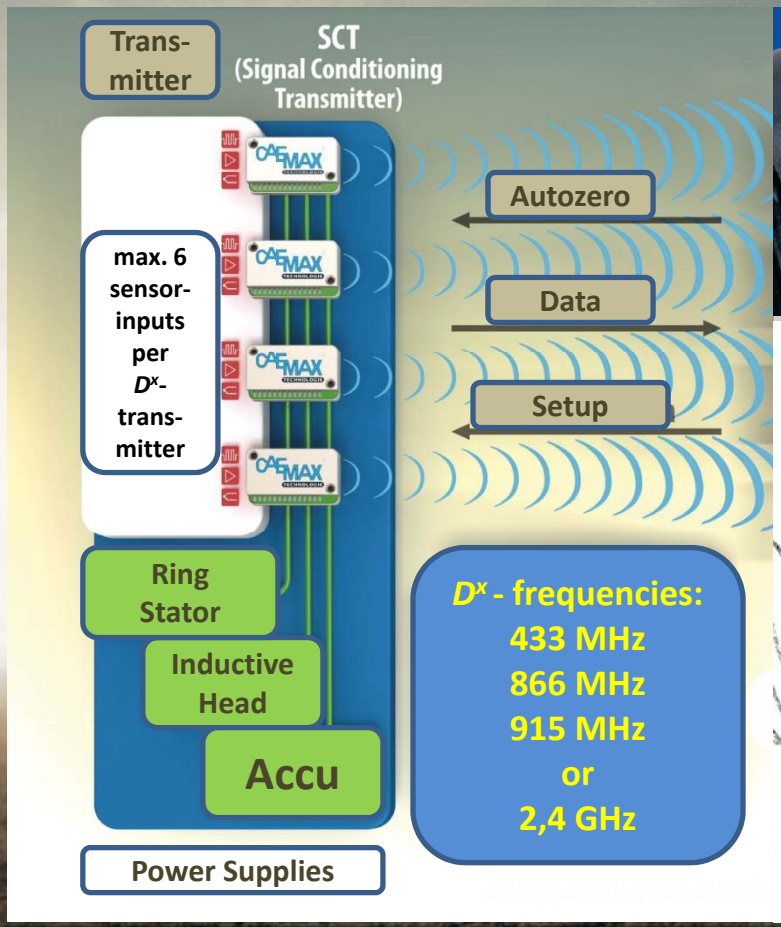
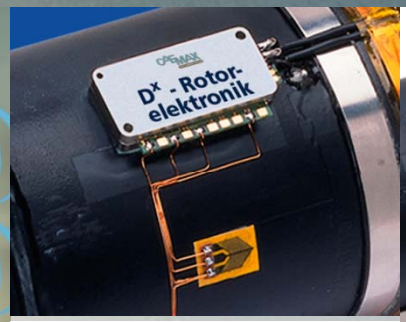
# Signal Conditioning and Transmitter Unit
# $D^x$-SCT (rotor electronic)







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# Receiving-, control- and interface unit $D^x$-RCI incl. data logger function


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# Receiving-, control- and interface unit $D^x$-RCI incl. data logger function


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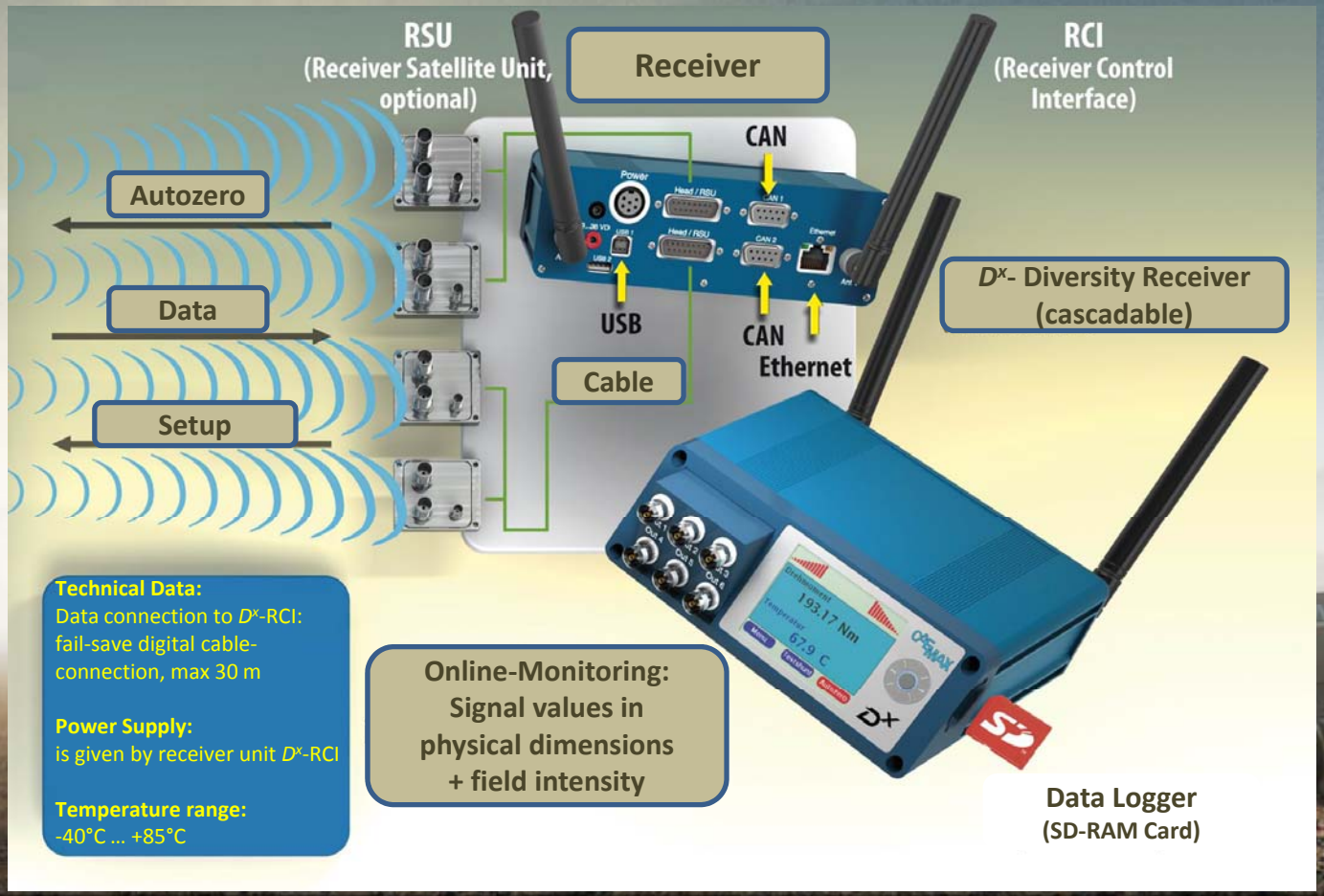
# Receiver Satellite Unit $D^x$-RSU

only needed if **$D^x$-RCI** cannot receive the data
from the transmitter (b.e. interferences or reflections).

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# $D^x$-Telemetry - Receiver

**Technical details:**

* Interfaces:
  6 analogue BNC-outputs +/-10V/16bit freely selectable
  CAN 2.0b freely programmable, max. 1MBaud,
  galvanic isolated
  Ethernet, TCP-Protocol secured, controlled by Webpage
  USB full speed for Plug and Play parameters
  SD-Card-Slot – Data logging up to 4GB
* Display: 2,83“ coloured OLED (highest contrast)
* Handling: multifunctional key (5 keys and rotating function)
* Synchronisation of  up to four transmitters within nsec
* Inductive power: digital controlled, up to 20W
* Power Supply: 9-36V DC

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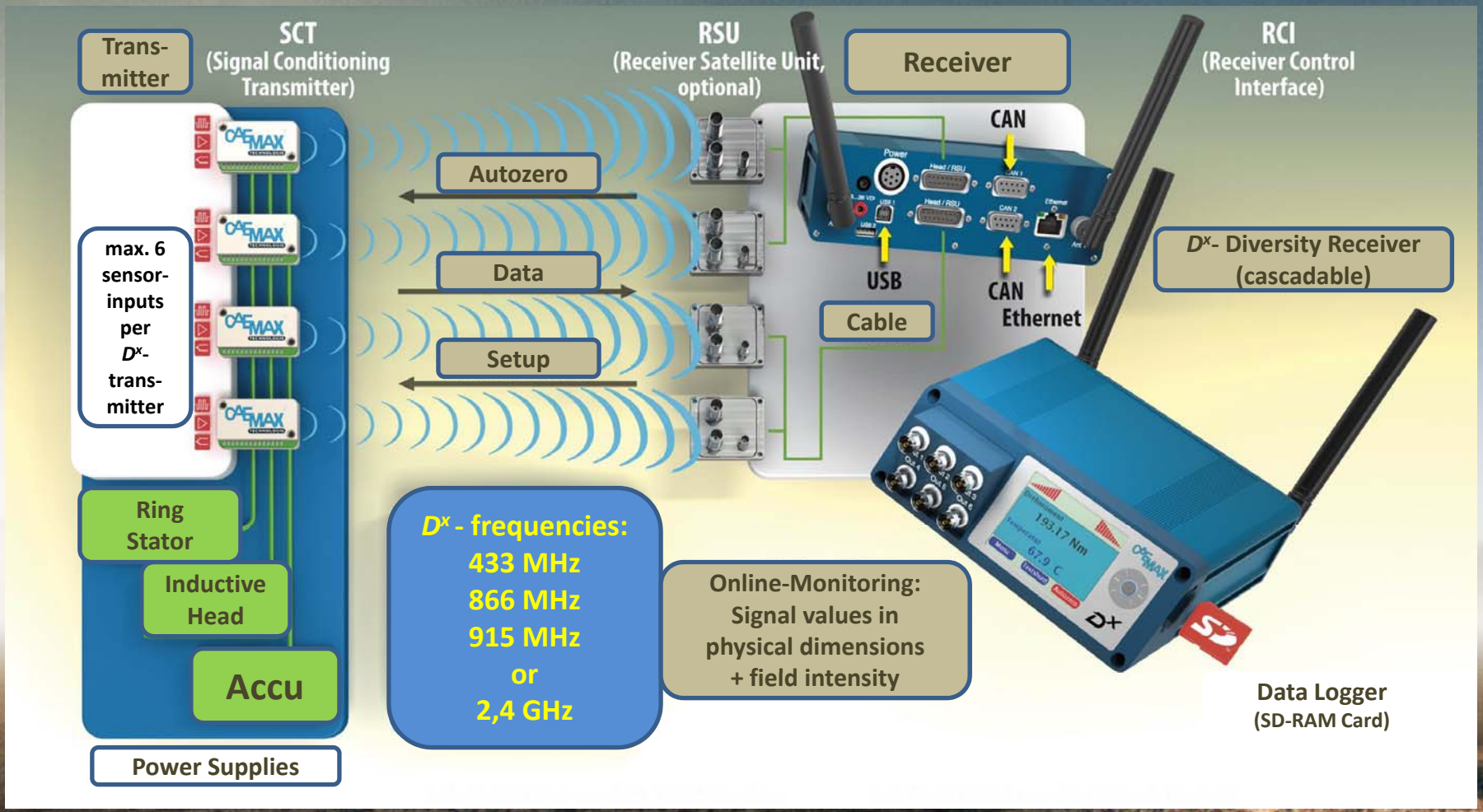
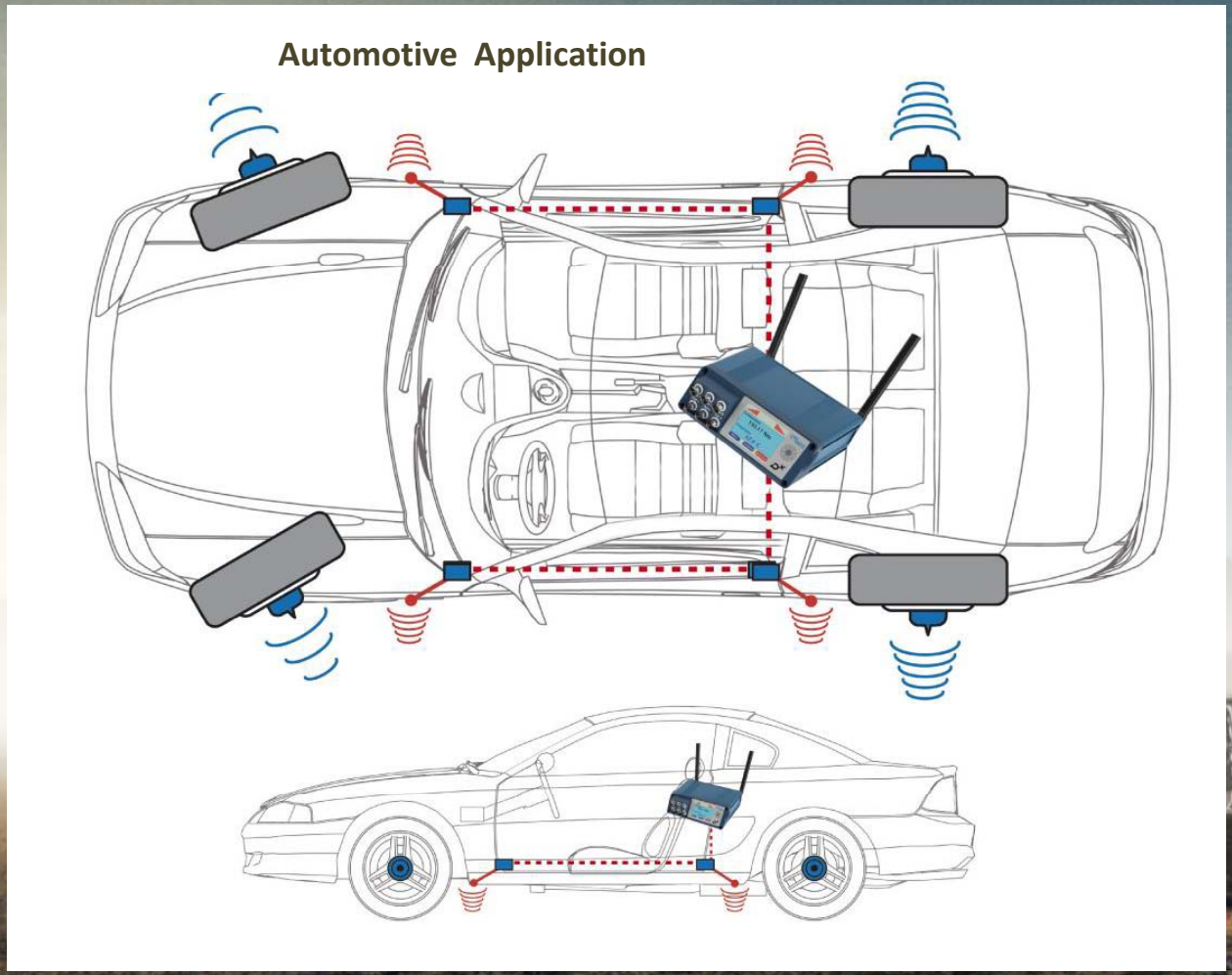
# $D^x$ → flexible in using for all tasks




Confidence by Experience

# Special project with company Kistler

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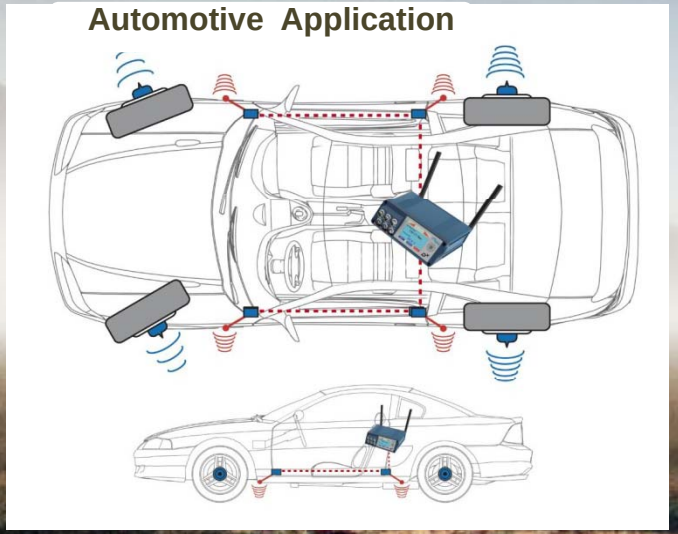
# Special project with company Kistler

To hold the transference noise rate minimum, two small antennas are appropriated on every side of the vehicle in the area of the outdoor mirror or treshhold. We use small satellite receivers and a digital bus to transfer data between outdoor antennas and wireless onboard electronic.

**Technical specifications required :**

Samplingrate: 1 kHz
Resolution: 16 bit
Frequency: 2.4 GHz, ISM-Band,
→ for worldwide application
Time delay: 10 ms
Perfect working under wet conditions!

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# Examples of $D^x$-Telemetry application:

For regulation of braking and driving torque and for all following applications you will need wheel force transducers (WFT):

Development of braking systems
Development of all-wheel systems
Development of ESP, ABS-algorithms
Regulation of losses in the powertrain
Hybrid: Analysis handling of recuperation systems
General analysis of vehicle dynamics

WFT´s has to be simple to mount and easy in using. The actual availability of the test vehicles is limited in the different developing departments
→ setup time has to be as short as possible!


Data Logger
(SD-RAM Card)

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**Thank you very much**
**for your attention!**


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