

## User Manual for

## SDR traffic / SDR traffic<sup>+</sup>

## DataCollector

Edition 8.2\_1502



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## 1 Correct Use

The counting system SDR*traffic* / SDR*traffic*<sup>+</sup> is solely intended for the collection of data in road traffic.

The Safety and operating instructions in this manual must be strictly observed. Therefore please read the entire operating instructions before using the product.

This product fulfils the legal, national and European requirements. All company names and product designations are trademarks of the respective holder. All rights reserved.

### 2 Safety Regulations

- In case of damage resulting from the non-observance of these operating instructions, the warranty/guarantee shall become null and void! We shall not assume liability for consequential damage!
- We shall not assume liability for material or personal damage caused by improper handling or non-observance of the Safety instructions. In such cases the warranty/guarantee shall become null and void.
- Unauthorised opening, conversion and/or modification of the product is not allowed for safety and approval reasons (CE).
- Operating this product in environments with an explosive atmosphere (zone 0, zone 1, and zone 2 as well as zone 20, zone 21, and zone 22) as specified in the EU directives ATEX equipment and ATEX workplace (94/9/EC and 1999/92/EC) is strictly prohibited by the manufacturer!
- Please handle the product with care; shocks, impact or falling, even from a low height, may cause damage.
- Do not operate the product if the housing is damaged!
- Only use original spare parts from the manufacturer for operation of the instrument.
- In all other cases please contact: <u>support@datacollect.com</u>

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### 3 Quick-Start Guide

Step	Explanation	Chapter	Page		
only once	Check your shipment to make sure it is complete	4	3		
	Register at <u>www.myTrafficData.com</u> Afterwards you will receive a password from DataCollect.	-	-		
Execution	Set the DataCollector clock (if applicable) – see DataCollector manual	-	-		
	Activate your SDR via DataCollector / Smartphone at <u>www.myTrafficData.com</u>	9.1	22-27		
1	Create a setup file at <u>www.myTrafficData.com</u>	10	28-32		
2	Mounting of the pole mount and the SDR carrying case	6	11		
3	Connecting your SDR to the power supply	8	19-20		
4	Processing of the Intro	8.5	21		
5	Parameter settings of the SDR via DataCollector / Smartphone	11	33-36		
	After completing the settings your SDR is now ready for operation!				
6	Readout of data via DataCollector / Smartphone	12	37-40		
7	Uploading of data for creating report to <u>www.myTrafficData.com</u>	13	41-42		



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## 4 Scope of supplied components

The scope of supply varies depending on the power supply.

#### 4.1 SDR Mobil

Position	Anzahl	Komponenten
1	1	SDR with case mobil
2	1	SDR User Manual <b>(via email as a pdf)</b>
3	1	AkkuPack
4	1	AkkuPack Setup and Maintenance Manual
5	1	Charger for AkkuPack
6	1	SmartBracket lockable, incl. padlock
7	1	SmartBracket Setup Manual

#### 4.2 SDR Main

Position	Anzahl	Komponenten
1	1	SDR with case and external power connector
2	1	SDR User Manual <b>(via email as a pdf)</b>
3	1	SmartBracket deep lockable, incl. padlock
4	1	SmartBracket deep Setup Manual
5	1	PowerUnit with connecting cables
6	1	PowerUnit Setup Manual

#### 4.3 SDR Solar

Position	Anzahl	Komponenten
1	1	SDR with solar case
2	1	SDR User Manual <b>(via email as a pdf)</b>
3	1	AkkuPack
4	1	AkkuPack Setup and Maintenance Manual
5	2	SmartBracket lockable, incl. padlock
6	1	SmartBracket Setup Manual
7	1	SolarSystem
8	1	Operating manual for SolarSystem



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#### 4.4 Accessories

#### 4.4.1 DataCollector

The DataCollector is used for the parameterisation of the SDR and for downloading data using the SD card.

A corresponding customer access to the website <u>www.myTrafficData.com</u> is required for the generation of setup files.

For exact information on how to operate the DataCollector, please refer to the instructions enclosed with the DataCollector.

#### 4.4.2 Card Reader

The card reader allows you to read the SD card of the DataCollector via a USB connector and to transfer data to your PC.

#### 4.4.3 Smartphone

A smartphone (Android OS) is used for the settings and for data download via *Bluetooth*<sup>®</sup> as well as data transfer via 3G / 4G (depending on the smartphone). It allows on-site monitoring of the traffic data acquisition. Generating setup files requires customer access on the website <u>www.myTrafficData.com</u>.

For exact information on how to operate the SDR via Smartphone please refer to the helpguide which is included in the Smartphone App or to this manual.









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#### 4.4.4 Tripod

The stand offers the possibility of installing the SDR in places where a stationary pole does not exist. The stand is available in steel or aluminium.

Maximum installation radius: 0.55m

Minimum installation height: 1.65m

Maximum installation height: 2.10m



#### 4.4.5 Laser45

Registered tool for a precise installation of the 45° angle. For exact information please refer to the setup manual enclosed with the Laser45. For further information on the Laser45 please refer to **Chapter 6.5**.



#### 5 Option variants

The SDR side-looking radar measurement system is available in versions with four sets of options:

SDRtraffic and SDRtraffic+

and

SDRbike and SDRbike+

This manual describes the options SDRtraffic and SDRtraffic+.

Each of these SDR versions features different and unique functions, which are described below.



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#### 5.1 SDRtraffic

SDR*traffic* features the capability of measuring and counting mixed traffic of 2 classes (car / truck).



The SDRtraffic settings can be made on site without any prior setup via myTD or Smartphone at a lateral distance of up to a max. of 3m and a max. height of 2m via DataCollector.

If the installation height and distance differ from these settings, the system must be set up via smartphone on site or via myTD and DataCollector. The installation area can be extended to a height of max. 8m and a lateral distance of max. 10m.

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## 5.1.1 Apps for SDRtraffic

Various optional apps for SDR*traffic*, which can be purchased separately, are described below:

Арр	Soft / Hardwa re App	Beschreibung	lcon
Speed measurement	Soft	This version of the SDR features the capability of measuring the speed of vehicles.	R.
Direction measurement	Soft	This version of the SDR features the capability of measuring the number of vehicles in a particular direction.	•
Direction measurement, total	Soft	This version of the SDR features the capability of measuring the total number of vehicles independent of the direction.	
Direction measurement, separate	Soft	This version of the SDR features the capability of measuring the total number of vehicles in two directions separately.	
Bridge mounting	Soft	Allows a bridge measurement. This allows an overhead measurement of lane selected and direction based traffic data.	
Timer	Soft	This function allows you to set time-dependent active phases of the SDR. Setting the times is explained in the separate section on parametrisation.	$\bigcirc$
Summer time / winter time	Soft	The clock is automatically reset to summer and winter time	**
Flash upgrade	Soft	The SDR software can be upgraded via the <i>Bluetooth</i> <sup>®</sup> connection of the DataCollector.	
Traffic Flow	Soft	Online Monitoring Tool for a local monitoring of the traffic flow	$\sim$

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#### 5.2 SDRtraffic+

SDRtraffic<sup>+</sup> features the capability of measuring and counting up to 4 classes.



Roadside Distance

The SDRtraffic<sup>+</sup> settings can be made on site without any prior setup via myTD or Smartphone at a lateral distance of up to a max. of 3m and a max. height of 2m via DataCollector.

If the installation height and distance differ from these settings, the system must be set up via smartphone on site or via myTD and DataCollector. The installation area can be extended to a height of max. 8m and a lateral distance of max. 10m.

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#### 5.2.1 Apps for SDRTraffic+

Various optional apps for SDR*traffic*<sup>+</sup>, which can be purchased separately, are described below:

Арр	Soft / Hardware App	Beschreibung	lcon
Speed measurement	Soft	This version of the SDR features the capability of measuring the speed of vehicles.	
Direction measurement	Soft	This version of the SDR features the capability of measuring the number of vehicles in a particular direction.	•
Direction measurement, total	Soft	This version of the SDR features the capability of measuring the total number of vehicles independent of the direction.	
Direction measurement, separate	Soft	This version of the SDR features the capability of measuring the total number of vehicles in two directions separately.	<b>0</b> ↓ ②
Bridge mounting	Soft	Allows a bridge measurement. This allows an overhead measurement of lane selected and direction based traffic data.	
Timer	Soft	This function allows you to set time-dependent active phases of the SDR. Setting the times is explained in the separate section on parametrisation.	$\bigcirc$
Summer time / winter time	Soft	The clock is automatically reset to summer and winter time	*
Flash upgrade	Soft	The SDR software can be upgraded via the <i>Bluetooth</i> ® connection of the DataCollector.	
Traffic Flow	Soft	Online Monitoring Tool for a local monitoring of the traffic flow	M

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## 6 Assembly

#### 6.1 Assembly of the Smartbracket

The assembly instructions for the SmartBracket can be found in the enclosed installation instructions.



Smartbracket: Mobil / Solar

Smartbracket Deep: Mobil / Solar

#### 6.2 Assembly of the SDRtraffic / SDRtraffic+

The SDR case is hooked into the four holes provided in the mounted SmartBracket using the four locking bolts on the rear side and it is secured by a locking mechanism and padlock.



#### 6.3 Bridgemounting

An overhead installation of the SDR*traffic* / SDR*traffic*<sup>+</sup> is generally possible. A suitable mounting device has to be supplied by the customer.



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## 7 Place of Installation

#### 7.1 Road side

Our installation system allows mounting of the SDR on poles, trees, buildings, etc. When choosing the installation location for the SDR you must make sure that no objects such as trees, buildings, etc. block the SDR's "view" of the road.

The following requirements must be observed during installation of SDR:

Technical requirement	DataCollector (without prior setting)	DataCollector (with settings on myTD)
Installation height	min.1m up to max. 2m	min.1m up to max. 8m
Roadside from edge of traffic lane	min.1m up to max. 3m	min.1m up to max. 10m
Elevation (inclination angle – see page 14)	90°	calculation via myTD
Azimuth (horizontal angle)	45°	45°





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The horizontal alignment can **also** be made with the **Laser45**. This optional accessory allows the user to easily, quickly and precisely set the important 45° angle as precisely as possible.



- Caution! Before starting the adjustment process, make sure to disconnect the SDR electronic from the power source.
- (ii) According to the assembly drawing (see below), measure the distance (d<sub>1</sub>) between the assembly position of the SDR and the road markings and position a reflector (d<sub>2</sub>) with identical spacing some distance away (10m to 15m).
- (iii) Attach Laser45 using a vacuum cup to the front side of the radar unit or to the Smartbracket and fix it. Switch the Laser45 on by turning the wing screw and focus the direction of the reflector roughly by tilting the laser guidance (elevation).
- (iv) Now align the rotatable combination of Laser45, SDR and / or Smartbracket such that the laser beam strikes the reflector positione some distance away. This ensures a very precise 45° alignment.
- (v) Finally tighten the assembly screws of the Smartbracket and if necessary hook in the SDR box and lock it.



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#### Vertical alignment

The vertical angle depends on the installation height of the SDR.

At a height of 1 m the correct angle is 90°. The angle becomes smaller as the installation height increases. The angle range goes from 45°-90°.

Should the installation height vary you can calculate the correct vertical angle via myTD – **see** chapter 10.

#### Vertical alignment with use of a DataCollector:

ATTENTION! Configuration of an SDR via DataCollector is subject to the restriction that it cannot be installed higher than 2.0m (6,6 feet). The vertical angle remains 90°.

#### Vertical alignment with use of an angle measuring device:





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The following graphics show the different installation options.

#### Installation option I

#### 2 Lanes // 2 Directions (Right-hand traffic)



## \* Alternative

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#### Installation option II

2 Lanes // 2 Directions (Left-hand traffic)

Please note that lane 1 and lane 2 have now been switched. Lane 2 is now the closer lane (approaching traffic).



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#### Installation option III





## \* Alternative

The values for distance 1 and distance 2 may be similar. If the road is wider than normal, distances 1 and 2 have to be measured.

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#### 7.2 Special Installation - Bridgemounting



The SDR electronic needs to be set at a 30° angle, downward frontal to the measured lane.

Tip: Tilt the SDR case for 25°-30°. The missing angular degrees can then be accurately adjusted by tilting the SDR electronic.

For detailed information regarding the settings on <u>www.myTrafficData.com</u> please go to **Chapter 10.5.** 

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## 8 Commissioning

#### 8.1 Power supply via AkkuPack

Please refer to the enclosed AkkuPack instruction for the maintenance and loading technology for the AkkuPack.

The standard size of the SDR accommodates enough space for the AkkuPack, which has a battery operating time which is up to 12 days (at a surrounding temperatur of 20°).

For the installation of the AkkuPack inside of the SDR case first open the load securing strap. Afterwards please insert the AkkuPack in the opening and fasten the strap by pulling.

Should you wish to double the battery operating time, DataCollect offers the opportunity to increase the size of the case, so that two AkkuPacks can be inserted.

#### 8.2 Power supply via PowerUnit

For the installation instructions of the PowerUnit, please refer to the enclosed commissioning instructions.

To laterally insert the PowerUnit into the deep SmartBracket, first remove the cross bar from the SmartBracket and then push the PowerUnit into the clear opening.

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#### 8.3 Power supply via SolarSystem + Case 1450 Solar

For the installation instructions for the please refer to the enclosed commissioning instructions. Please observe the distance from the SmartBracket of the SDR of max. 110cm.

The optional solar extension cable makes it possible to extend the distance to the poles mount to a max. of 235 cm.

#### 8.4 Protection against theft

By pushing in the padlock between the SmartBracket and the SDR case, your SDR is protected against unauthorised removal. Two additional padlocks located on the handles of the case secure it against unauthorised opening. These padlocks can be optionally purchased.











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#### 8.5 Bootup of the SDRtraffic / SDRtraffic+

After connecting the battery to the SDR both LED will light up for approx. 10 seconds. During this time the battery voltage is checked and displayed as follows:



Option	Description	
Check 1 Battery Voltage at Power supply via AkkuPack	Upper LED flashes:	Charge condition: Completely charged Voltage: $U_B \ge 12,7V$ Operating Time: 18Ah up to 12 days 22Ah up to 15 days
	Both LED flash:	Charge condition: Partly charged Voltage: $11,8V \le U_B < 12,7V$ Operating Time: 18Ah between 2-6 days 22Ah between 3- 7days
	Lower LED flashes:	Charge condition: Not charged, Battery almost empty Voltage: $U_B < 11,8V$ Operating Time: max. of 48 hours If the voltage drops below 10,4V the device will automatically switch off.
Check 2 Lane activity	Upper LED lit up:	Lane 1 is measured
	Both LED lit up:	Lane 1 and 2 are measured
	Lower LED lit up:	Lane 2 is measured

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## 9 Activation of the SDR via www.myTrafficData.com

In order to commission the SDR, a login to <u>www.myTrafficData.com</u> is required! If you are not yet registered, please contact our employees via <u>support@datacollect.com</u>.

**Please note!** The necessary steps of the previous chapter need only be performed *once* when setting up a <u>new</u> instrument of type SDR.

#### 9.1 Activation via DataCollector

#### 9.1.1 Generation of the activation file

To activate the SDR, please connect your DataCollector to the SDR and load an instrument file to your DataCollector. This file need not contain any measuring data (only instrument data). The instrument file on the SD-Card has the ending **0000000.sdr**.

Step	Description	DataCollector Symbol	Display duration
2	Starting the device requires that you press and hold one of the two membrane buttons $(\geq 0.3s$ (bounce time)), after which time it will perform a self-test (function test). When the SD card is inserted, the SD card LEDs will light up red.	****** *******	approx 5sec (without SD card approx. 1sec.)
3	The intro will start in the next step – LED duration 3x. The intro checks if all internal modules (SD card, <i>Bluetooth</i> <sup>®</sup> , battery, buttons) function properly.	$ \begin{array}{c} & & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ $	approx. 2sec

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Step	Description	DataCollector Symbol	Display duration
2	After the intro the white LED in the GetData button prompts you to press it by flashing.	à the second sec	approx. 15sec
3*	Scan for <i>Bluetooth</i> <sup>®</sup> -enabled devices (DSD, SDR) if the DataCollector's internal memory does not already show such devices. The scan process is visualised by the fast flashing of the <i>Bluetooth</i> <sup>®</sup> LED. As soon as a <i>Bluetooth</i> <sup>®</sup> contact is established to a device, the fast flashing of the LED switches to continuous illumination.	• • • • • • • • • • • • • • • • • • •	approx. 45sec
4	Communication establishment to the now connected device is shown by a slow flashing <i>Bluetooth</i> <sup>®</sup> LED.	ج ج ج	approx. 5sec
5	Download of the system and traffic data stored in the device, storage of this data on the SD card of the DataCollector in the form of files with the extensions *.dsd // *.sdr. Now the Bluetooth and SD Card LED continue to flash slowly during the download.		approx. 20sec
7	If unable to find a device, the DataCollector will switch off automatically after 5sec.	-	-

\*If devices are already stored in the DataCollector's internal memory, the connection to a stored device will be established immediately (approx. 6s / device). The order of the devices to be contacted is defined by the list of recently contacted devices which is stored in the DataCollector. If several instruments are within the *Bluetooth*<sup>®</sup> range of a DataCollector,

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switching over between the instruments can take place as soon as the BT communication to an instrument is established – **see DataCollector Manual** / **Chapter 15.3**.

The establishment of the connection between the DataCollector and the instrument is confirmed by the SDR by means of the lighting up of both LEDs.

The subsequent data exchange is symbolised as a progress display by both LEDs integrated into the SDR: Bottom LED flashing 0% - 50% of the memory 
→ bottom LED lights up and top LED flashes 51% - 100%).

After successful completion of the data download, both LEDs of the SDR are switched off while the white LED of the Setup button on the DataCollector now flashes.

LED off 🔿 // L

// LED lit up (

// LED flashing 🦳







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#### 9.1.2 Upload of the activation file

Now you can use your login information to log in at <u>www.myTrafficData.com</u>. The first thing you see there will be the dashboard.

mytrafficdata webRep	oort		LONE
Home + Account + Dashboard		Welcome, John E	ooe   <u>Profile</u>   <u>Log out</u>
• 💿 Quick Start	ann Store		
🔸 🚘 Files	a oppositions	8	
Sites	Geo reference / Geo mapping *	Instruments	
Networks		Last data	+
🔸 🏟 Instruments			
🔸 🙇 Account		Last reports	*
		System requirements	*

In the menu bar at the left of the screen click **Instruments**. A sub-menu opens. Now click **Activate**.





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In the middle of the screen you will see a file upload area for activating your device. Now click **Browse** to select the desired file on the SD Card of the device to be activated.

Now select the file you wish to upload. Confirm your selection by clicking **Open**.

mytrafficdata webRep	ort 🖉 🖉 🧔	
Home Instruments Activation		Welcome, John Doe   Profile   Log out
O Quick Start     Inles	Activation	
Siles	🔹 .web File	
Networks  Comparison  All  DSD  SDP	.web file * Durchsuchen 000000000000000.sd Allowed file extensions are: .web, .sdr, .dsd, .etu,	Ir .key, .ucm, .zip
ETube EScan DataCollector Smartphone		

After selecting the file click Activate.

Successful activation is confirmed via an info line (yellow). Now your SDR is displayed with the corresponding serial number.

ne + Instruments + Main Street		Welcome, John Doe   P <u>rofil</u>	<b>E   1</b>
r You have been successfully a	ctivated for the device Device 1306F4177B0UL055 as Adm	inistrator.	
9 Quick Start	Main Street (SDR	:)	
iltes	Activation     Activation     Activation	y 🖉 Setup	
latworks	Attribute Name	Value	ŕ
) Instruments	Configuration number	1306F04177UL051	
	Version	7.39	
	Mode of operation	Traffic+	
SD	Bluetooth	no	
DR	GPRS	no	
Fube Scan	Relais	no	
ataCollector			

Your SDR is now activated and ready to be set. Therefore please go to **chapter 10**.



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Under Instruments / SDR you can now see your activated device ready for the setup.

<b>0</b>	Lot C	mytrafficdata webReg	port	📥 🤕		nytrafficdata webReport
Inter announces 144						Weissen, InterDoors Eadler Lacous
<ul> <li>Orack Start</li> <li>Environment</li> </ul>	SDR					
	NOR.	Comparation invention	Hint	Contraction of the second s	Wataney Mr.	1996
Network A		2402552728,0066238	23	100		
- O. Parmassin						
48						
neu uon						
ETUDE						
EScan						
Elizatii						
DataCollación						
Sourtphono						
wedwata -						
e 🐥 Account						
NOT 1811131		0	Nange Lengunge 🖌			IN 2010 2020 Device in a first factories. Scott 1 Scotts

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#### 10 Parameter settings

The following section describes in detail how to setup your SDR.

If you wish to give your SDR an alias name, click the serial number to open an editable field. You can enter an alias name here. For example, you can number your SDRs sequentially. Confirm the input with Enter. The list of devices now also displays the name you assigned, in addition to the serial number.

se i <u>heirinnenir</u> i 1402-427.	ACCOMPANY.		Weirnme, John Doe   <u>Printie</u>
Quick Start	1402F4272D 00NL018	🥜 (SDR 🛋)	
🗧 Files		10-11-12	
	Activation 11 Info / Setur		
o Instrumenta	Attribute Name	Value	
All Market and All	Configuration number	1402F4272B 00NL019	
NI	Version	8.10	
DED.	Mode of operation	Traffici	
SDR	Bluetooth	yes	
ETube	GPRS7	no	
EScan	Relais	ino	
NC			
EGuard			
	• 🧕 Setups (1)		
DataCollector	• 👼 Upgrades		
Smartphone			
6	\		

You can set the parameters of the SDR in the setup area. You can access this area by pressing the **Setup** tab.



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#### 10.1 Basic settings Panel

Basic setting	Description
Speed measurement	Option to switch between km/h and mph
Length measurement	Option to switch between metres and feet

°*© "	ytrafficdata webReport	CON L		<b>1</b>	oto mytra	afficdata wel
Home (Instruments) 1402F4272	8 00NL019				Welcome, John Doe (	Pedfie   Log out
+ 🗿 Quick Start	1402F4272	B 00NL019	(SDR ≈)			
(200-00)	Activation. 🕐 Int	n 🖉 Settap				
Mensorks	- O Danie Setting	н				
All DSD	Speed Metric: Length Metric:	♦ km/h ● Meter		e mph G Foot		
SDR UTubr	н 🥜 Арры					
EScan	🕞 👜 Configuratio	92				_
NC EGuard	PSL			60		
DataCollector	Site name:	Mainstreet 1	(max. 16 lette	is)		
Smartphone					🧃 Stare 🛛 🚆 Downlo	ad
Account	+ 🖪 Setups (1)					
	🔸 🥣 Upgrades					
Westion 10710 1 5-9		Change Language 💌			2005 2014 David allert Tradic Systems	Gabit   Ingent



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#### 10.2 Panel Apps

Under Apps you can select the basic functions of your SDR*traffic or traffic*+. Only those functions that you purchased can be activated. An explanation of the individual functions can be found in **Chapter 5.1.1 Apps for SDR***traffic* or **Chapter 5.2.1 Apps for SDR***traffic*+.

	wentte			· · · ·
- 1402-42758 00%005	12.			Waterreadole De
ure -	1402F4272	2B 00NL019 (SD	(R ➡)	
-	Admitting Linte			
	STATISTICS IN			
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	- se appe			
	🔤 🖯 Hike		📴 🔿 Hike+	
	🛃 🗄 traffic		🛃 🔹 Iraffic+	
	🔠 🛛 Speed		Mount on bridge	
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	📷 🗆 Bayigi	nt saving time	See 11mar	
	🔸 m Configuratio	XI		
	PSL		60	
	Site nome:	Mainstreet 1	(mass. 1if letters)	
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				- <b></b> - Down
	<ul> <li>B-Setups (1)</li> </ul>			
	🕴 😝 Upprades			

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#### 10.3 Panel configuration

<u>,</u>	mytrafficdata webi	Report		mytrafficdata webReport
	174104-010			Antonio adama (1996) ara ar
+ @ Quick Start + 🚘 Rics	1402F4272B	00NL019 (SDR	-)	
attentional	<ul> <li>Activation</li> <li>2:10</li> <li>Central data (set on particular)</li> </ul>	<u>Kasa</u>		
41 DSD	· Apps			
SDR Filibe	A Dominant Vehic	eType ≸15avatar€Coavata on ≹Data ⊂Docementy	nak * Outgang & Daws	
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Activate	PSL.		+ 64	
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	+ 📷 Setass (a)			
	🔹 🥃 Unitalas			
There and the set.		Channel Sectore 1		5 104 TOOLD COMP. Date Server Date Income

Configuration	Description
Dominant vehicle type	Class Car / Class Truck
Direction	Oncoming / Outgoing / Cross
Mounting	For side mounting see chapter 6
Installation height	Adjustment of installation height – min 1 m
Direction Oncoming	Adjustment of distance of the oncoming lane – min 1 m
Direction Outgoing	Adjustment of distance of the outgoing lane – min 1 m
Vertical angle	Automatic calculation of mounting height and distance



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#### 10.4 Panel configuration – Bridgemounting

	weakepon			LO Web	webout -
7011 (E220 2013					and parally
Main Street (SDR#	•)				
Antonio Inter Atore					
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25. 59M					
🛄 (b) 24ee			🧧 🔿 0 km		
📓 🖄 7/atta			😺 👁 Traffici		
E P Seed			🔤 🕅 Haint on beisse		
🔚 🕑 Direction			and Directions		
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B Barris of What-Tape 8	Reference Filler buch				
III Recordson Recordson	Bon & Dearrang IT Balance	(2.perio			
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PáL.		7.10			
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					Maria 📰
					and a second second second second
- Thomas to					
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and the second sec					

To activate the function of the Bridgemounting please click on Bridemounting in the panel Apps.

After that please also click on Bridemounting in the panel configuration. The oncoming direction will be already preset.

#### 10.5 PSL

You can set the speed allowed by the traffic regulations by pushing the slider.

#### 10.6 Site Name

**Name:** Enter the name of the site here. It is **limited** to **16 alphanumeric characters**. Do not use any special characters here, such as:

\/\***?<>|:** 

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#### 11 Download and transmit of the setup file

#### 11.1 Via DataCollector

Create the setup file by clicking the **Download** button. The name of the setup file (stp.xxxx.sdr) must not be changed!

## 冒 Download

#### Storage location for DataCollector: DataCollector SD card

Insert the SD card with the saved setup file in the DataCollector and connect your SDR to the power supply.

Step	Description	DataCollector Symbol	Display duration
1	Performance of the intro – see chapter 10	-	approx. 2sec
2	After the intro the white LED in the GetData button prompts you to press it by flashing.	¢	approx. 15sec
3*	Scan for <i>Bluetooth</i> <sup>®</sup> -enabled devices (DSD, SDR) if the DataCollector's internal memory does not already show such devices. The scan process is visualised by the fast flashing of the <i>Bluetooth</i> <sup>®</sup> LED. As soon as a <i>Bluetooth</i> <sup>®</sup> contact is established to a device, the fast flashing of the LED switches to continuous illumination.	• •	approx. 45sec
4	Communication establishment to the now connected device is shown by a slow flashing <i>Bluetooth</i> <sup>®</sup> LED.	* * * * *	approx. 5sec



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5	Download of the system and traffic data stored in the device, storage of this data on the SD card of the DataCollector in the form of files with the extensions *.dsd // *.sdr. Now the <i>Bluetooth</i> <sup>®</sup> and SD Card LED continue to flash slowly during the download.	•	) (*) (*)		approx. 20sec
6	In the next step the Setup button prompts you to press it by flashing.		Ö ()		approx. 5sec
7	The Setup file stored on the SD card of the DataCollector is now transferred via the still existing communication connection between the DataCollector and the instrument.	•	Ŭ ₿` <	>	approx. 3sec
8	The finalisation will be automatically carried out without any further keystroke. The DataCollector automatically shuts down after approx. 5sec (Auto Off).		-		-

\*If devices are already stored in the DataCollector's internal memory, the connection to a stored device will be established immediately (approx. 6s / device). The order of the devices to be contacted is defined by the list of recently contacted devices which is stored in the DataCollector. If several instruments are within the *Bluetooth*<sup>®</sup> range of a DataCollector, switching over between the instruments can take place as soon as the BT communication to a instrument is established – see **the DataCollector Manual / Chapter 15.3**.

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"Memory Card"

.Setup"

LED

LED

**Caution!** Setup files can only be created via your web access at <u>www.myTrafficdata.com</u>. These files are exclusively instrument-related, i.e. you can only parameterise the respective instrument using the DataCollector, for which you have configured a corresponding *Setup file* on the web page!

Several Setup files of different instruments can be simultaneously stored on one SD card and can be consecutively transferred to the respective instrument.

When you press Setup, DataCollector starts the transfer of the setup file to the SDR. This process takes about 3 seconds. During the entire setup process the LEDs of the SDR remain switched off.



iatacollector ()

Afterwards, an **Online mode** starts for the purpose of a function check. The SDR then reports detected vehicles to the DataCollector for a period of about 2 minutes. The vehicles are then displayed based on their direction of travel, as follows:

..Get Data

LED

(A) Vehicles approaching the SDR:

#### ✤ Get Data LED flashes

(B) Vehicles moving away from the SDR (only SDR*traffic*):

#### Setup LED flashes

The online mode can be extended another 2 minutes by pressing one of the two keys (retrigger).

If there is no setup file or no valid setup file for the connected SDR, this is indicated by fast flashing of the SD card LED. Finally, the communication is terminated. The DataCollector switches off (Auto Off) and the SDR returns to operating mode.

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## 12 Read-out of data from the SDR

#### 12.1 Via DataCollector

Step	Description	DataCollector Symbol	Display duration
1	Performance of the intro – see chapter 10	-	approx. 2sec
2	After the intro the white LED in the GetData button prompts you to press it by flashing.	Ö (P)	approx. 15sec
3*	Scan for <i>Bluetooth</i> <sup>®</sup> -enabled devices is visualised by the fast flashing of the <i>Bluetooth</i> <sup>®</sup> LED. As soon as a <i>Bluetooth</i> <sup>®</sup> contact is established to a device, the fast flashing of the LED switches to continuous illumination.	••••••••••••••••••••••••••••••••••••••	approx. 45sec
4	Communication establishment to the now connected device is shown by a slow flashing <i>Bluetooth</i> <sup>®</sup> LED.	ج ج ج	approx. 5sec
5	Download of the system and traffic data stored in the device, storage of this data on the SD card of the DataCollector in the form of files with the extensions *.dsd // *.sdr. Now the <i>Bluetooth</i> <sup>®</sup> and SD Card LED continue to flash slowly during the download.	* * * * *	approx. 20sec
6	The finalisation will be automatically carried out without any further keystroke. The DataCollector automatically shuts down after approx. 5sec (Auto Off).	-	-



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The establishment of the connection between the DataCollector and the instrument is confirmed by the SDR by means of the lighting up of both LEDs.

The subsequent data exchange is symbolised as a progress display by both LEDs integrated into the SDR: Bottom LED flashing 0% - 50% of the memory → bottom LED lights up and top LED flashes 51% - 100%).

After successful completion of the data download, both LEDs of the SDR are switched off while the white LED of the Setup button on the DataCollector now flashes.

This enables a parameterisation (**Setup** -> see Chapter 11.2) of the instrument to be now carried out as required.

LED off // LED

// LED lit up

// LED flashing







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## 13 Evaluation via WebReport

13.1 Transfer of the measured data

#### 13.1.1 Via DataCollector

After transfer of the data from the SDR to the DataCollector there is a file on the SD card that contains the measurement data from your SDR. This file has the name of your measuring point and the ending \*.SDR (Example: Main Street.SDR)

For more information, please refer to the DataCollector manual.

Insert the SD card with the measurement data in a card reader that is connected to the PC. You can purchase the card reader directly from DataCollect!

Log in at <u>www.myTrafficData.com</u> and under menu item **Quick start** select the function **WebReport on the left side.** 

mytrafficdata webRe	port	
Home + Account + Dashboard		Welcome, John Doe   Profile   Log out
- O Quick Start	a App Store	
webkeport	Geo reference / Geo mapping *	Instruments +
		Last data +
		Last reports +
		System requirements +
		Demo data +
Cilor		Manual +
Sites		Installation guide +
Networks		
🔸 🌞 Instruments		
🔸 🤱 Account		
Version: td3.0-1.5	Change Language 💌	© 2005-2013 DataCollect Traffic Systems GmbH   Imprint



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Click Browse and navigate to the file with the measurement data from your SDR.



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#### 13.2 Evaluation settings

In the next step you can make settings for the evaluation.

Home + Report + WebReport		Welcome, John Doe   Prafile   Lag o
• 💿 Quick Start	Configuration	n an
WebReport	Scale   Reset	g Both
	AM	MAAAMM
• 💼 Files	Formut *	Basic
Networks	Start date *	06/03/2013
• 🏘 Instruments	End date *	14/03/2013
<ul> <li>Account</li> </ul>	Posted Speed Limit *	70 💌
	Interval *	60 min 💌
	Duily start time *	00:00
	Duily end time *	23:59
	Days *	V Mon V Tue W Wen V Thu V Fri V Set V Sun
	Speed Interval Bin	Default 💌
	Length Interval Bin *	Only the first 12 intervals are considered Default
	Directions	I Oncoming II Outgoing II Cross-section

Edition 8.2\_1502



In the upper area you will see the line charts of the vehicle quantity and the entry and exit speed for the entire period in which the SDR was active.

Below the line chart there are two slide controllers for the limitation of the measuring period. For this, push the controller at the left and right-hand end of the blue bar.

Designation	Description	
Enlarge	Zooms the line chart to the area set via the slide controller	
Reset	Resets the setting for the period and zoom back to the overall data view.	
Execution	Here you can select the type of evaluation generated between standard (4 pages) and extended (4 pages + one additional page each per measuring day). This function can be optionally acquired.	
Start date / End date	Shows the date/time, at which the evaluation begins / ends. To adjust the start / end date push the left-hand controller of the blue bar below the line chart.	
PSL	You can adjust the speed limit of the measuring point here. The value is first adopted from the loaded file, but can be changed as required.	
Interval	Here you can select the time division for the aggregation.	
Daily start and end time	Only vehicle data within the set time frame is considered in the evaluation. For full- day evaluation, please enter 0:00 as the start time and 23:59 as the end time.	
Weekdays	Here you can select which weekdays are to be considered in the evaluation.	
Speed Bins	You can create Speed class sets (see profile) which you can select here individually for your measurement.	
Length Bins	You can create length class sets (see profile) which you can select here individually for your measurement.	
Directions	Please choose here, which directions (oncoming, ongoing, both) shall be evaluated.	

You can proceed to the next step via the **Continue** button.

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#### 13.3 Definition v15, v50 und v85

v15: Shows the speed that is **not exceeded** by 15 % of the drivers.

v50: Shows the speed that is not exceeded by 50 % of the drivers.

v85: Shows the speed that is not exceeded by 85 % of the drivers.

**Example:** You sort 100 vehicles in ascending order by speed. The speed of the 86th vehicle corresponds to the value v85. You see, therefore, whether the majority of the road users are complying with the legal speed limit.

If 85% of all vehicles comply with the maximum permissible speed, e.g. of 50 km/h, then this speed is deemed accepted by the traffic. If the value v85 is substantially higher than the maximum permissible speed, traffic planning / traffic-calming measures should be taken.

Number of vehicles	km/h	v15 not exceeded by 15%	v85 not exceeded by 85%
1	2		
2	4		
3	6		
4	8		
5	10		
6	12		
7	14		
8	16		
9	18		
10	20		
11	22		
12	24		
13	26		
14	28		
15	30		
16	32	V 15 value	
17	34		
•••			
85	170		
86	172		V 85 value
87	174		
88	176		
97	194		
98	196		
99	198		
100	200		

You can proceed to the next step via the **Continue** button.

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#### 13.4 Site

mytrafficdata webRe	port			ONE
Home   Report   WebReport			Welcome, John Do	e i <u>Profile</u> i <u>Log out</u>
👻 😐 Quick Start	🖉 Configuration 🛛 🚺 Site	i sittar I		
WebReport	Site name *	Main Street		
	Comment	-		
	Direction oncoming	North		
	Oirection outgoing	South		
	= Back		1	Next 🛏
🔸 🚘 Files				
Sites				
Networks				
🔸 🌞 Instruments				
🔸 🤱 Account				
Version: td3.0-1.5	Change Language		D 2005-2013 <u>DataCollect Traffic Syste</u>	imi Gribii İ Imprint

Here you can take more details of the measuring point. The measuring point name is adopted from the measuring data of the setup, but can be adjusted at this point. All fields are alphanumerical and are limited to 16 characters.

You can proceed to the next step via the **Next** button.

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#### 13.5 Author

mytrafficdata webRe	eport		ONE
<u>Home</u> > Report > WebReport		Welcome,	John Doe   <u>Profile</u>   <u>Log out</u>
🝷 🕖 Quick Start	Configuration	Site	
WebReport	Institution	John Doe Ltd.	
	Department	Traffic Engeneering	
	Street	Main Street 1	
	Postal code	12345	
	City	Model Town	
	Country	United Kingdom	
🕨 🛅 Files	Name	John Doe	
Sites	Phone	+44-1234-5678-9	
Networks		Format: +49-2273-5956-0	
🔸 🌼 Instruments	Email	demo@john-doe.com	
> 🙎 Account	Logo	Durchsuchen_ Keine Datei ausgewählt	
	- Back	🔒 Store	📱 Download
Version: td3.0-1.5	Change L	anguage 🗸 © 2005-2013 <u>DataCollect Tra</u>	ffic Systems GmbH   Imprint

Here you can state details of the author, which will later appear on the report. You also have the possibility by means of Search to add your individual logo. The entries are adopted from your profile, but can be changed at random. Changes at this point are not transferred to your profile!

If you click on the **Report** button an evaluation in .pdf format is generated. You can save these on your PC. For this you require a pdf reader (e.g. Adobe Reader). If you do not have this software installed on your computer you can download it free of charge e.g. from <a href="http://get.adobe.com/uk/reader/">http://get.adobe.com/uk/reader/</a>.

#### 13.6 Sample evaluation SDR traffic / SDR traffic\*

After having requested the report you can directly **open** the evaluation or save it under **Save file** on your PC.

Von: https://	www.mytrafficdata.com	
sol Feefox mit	t deser Datei verfahren?	
@ Officen mit	Adobe Reader 9.3 (Standard)	
C Datei spek	bern	
Fir Dates	n deses Typs inner dese Aktion aut/Uhr	m

Edition 8.2\_1502

#### Standard report page 1

C

#### Traffic report



Author	
Institution	John Doe Ltd.
Department	Traffic Engeneering
Street	Main Street 1
Postal code	12345
City	Model Town
Country	United Kingdom
Contact	John Doe
Phone	+44-1234-5678-9
Email	demo@john-doe.com

Generated with DataCollect Webreporter version 1.0 at 12/08/2013 11:43:15

Site		Time Range	
Name	Main Street	Start date	06/03/2013 09:00
Dir. Oncoming (name)	North	End date	14/03/2013 12:59
Dir. Outgoing (name)	South	Days	Mo, Tu, We, Th, Fr, Sa, Su
Posted Speed Limit	70	Time Interval	60 minutes
Comment	-	Time / Day	00:00 - 23:59
Device type	SDR		

#### Length Classes [L in m]

Cross-section		North	South	
Time	Σ	Σ	Σ	
00:00-06:00	2229	1296	933	
06:00-09:00	9190	4570	4620	
15:00-19:00	15543	7704	7839	
06:00-22:00	48674	24223	24451	
00:00-24:00	52155	26025	26130	

#### **Calculated speeds**

[V in km/h]

	Vmin	Vmax	Vavg	V15	V50	V85	Vexc %
Cross-section	7	134	69	60	69	79	42.8
North	7	125	69	59	69	79	44.6
South	15	134	69	60	68	78	41.1

Descriptions

Vmin: Minimal velocity Vmax: Maximal velocity Vavg: Average velocity

V15: Critical velocity for the first 15% of vehicles

V50: Critical velocity for the first 50% of vehicles V85: Critical velocity for the first 85% of vehicles Vexc %: Speeding in %

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#### Standard report page 2



Traffic report



John Doe Ltd.
Traffic Engeneering
Main Street 1
12345
Model Town
United Kingdom
John Doe
+44-1234-5678-9
demo@iohn-doe.com

Generated with DataCollect Webreporter version 1.0 at 12/08/2013 11:43:16

Site		Time Range	
Name	Main Street	Start date	06/03/2013 09:00
Dir. Oncoming (name)	North	End date	14/03/2013 12:59
Dir. Outgoing (name)	South	Days	Mo, Tu, We, Th, Fr, Sa, Su
Posted Speed Limit	(70)	Time Interval	60 minutes
Comment		Time / Day	00:00 - 23:59
Device type	SDR		



#### Time / Volume graph

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#### Standard report page 3



## Traffic report



John Doe Ltd.
Traffic Engeneering
Main Street 1
12345
Model Town
United Kingdom
John Doe
+44-1234-5678-9
demo@john-doe.com

Generated with DataCollect Webreporter version 1.0 at 12/08/2013 11:43:16

Site		Time Range	
Name	Main Street	Start date	06/03/2013 09:00
Dir. Oncoming (name)	North	End date	14/03/2013 12:59
Dir. Outgoing (name)	South	Days	Mo, Tu, We, Th, Fr, Sa, Su
Posted Speed Limit	70	Time Interval	60 minutes
Comment		Time / Day	00:00 - 23:59
Device type	SDR		

#### Speed histogram



Edition 8.2\_1502

#### Standard report page 4



Traffic report



Author	
Institution	John Doe Ltd.
Department	Traffic Engeneering
Street	Main Street 1
Postal code	12345
City	Model Town
Country	United Kingdom
Contact	John Doe
Phone	+44-1234-5678-9
Email	demo@john-doe.com

Generated with DataCollect Webreporter version 1.0 at 12/08/2013 11:43:16

Site		Time Range	
Name	Main Street	Start date	06/03/2013 09:00
Dir. Oncoming (name)	North	End date	14/03/2013 12:59
Dir. Outgoing (name)	South	Days	Mo, Tu, We, Th, Fr, Sa, Su
Posted Speed Limit	70	Time Interval	60 minutes
Comment	Constant State	Time / Day	00:00 - 23:59
Device type	SDR		

#### Length histogram



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#### **Extended report page 5**

0

powered by 🙆 datacolec

-

John Doe Ltd.: SDR 1 (Direction: Both)

Time		Σ	AUTO	LKW	LZ	10	20	30	40	50	60	70	80	90	100	110	>110	Vmin	Vmax	Vavg	V15	V50	V85
2010-12-20 15	:00	268	257	11	0	0	0	0	4	21	88	100	46	8	1	0	0	34	94	62	53	62	72
2010-12-20 18	:00	422	408	12	2	0	0	0	0	19	122	186	82	11	1	1	0	45	108	64	56	64	74
2010-12-20 17	00	349	338	10	1	0	0	2	3	18	108	156	48	13	0	0	0	28	88	62	54	63	71
2010-12-20 18	:00	284	277	6	1	0	0	0	1	14	86	124	54	3	2	0	0	40	93	63	55	63	73
2010-12-20 19	00	148	147	1	0	0	0	0	0	8	34	17	25	4	0	0	0	45	88	64	56	65	71
2010-12-20 20	00	120	120	0	0	0	0	0	0	4	32	57	20	7	0	0	0	45	89	64	58	64	74
2010-12-20 21	00	102	102	0	0	0	0	0	0	3	27	49	19	4	0	0	0	46	86	65	58	66	72
2010-12-20 22	:00	62	61	0	1	0	0	0	0	3	14	25	18	1	0	0	1	47	115	66	57	65	74
2010-12-20 23	00	41	40	1	0	0	0	0	0	4	9	17	10	1	0	0	0	43	82	63	52	64	72
[Mon, 20 Dec.]	5	AUTO	LKW	LZ	10	20	30	40	50	) 6	0	70	80	90	100	110	>110	Vmin	Vmax	Vavg	V15	V50	V85
00:00-06:00	0	0	0	0	0	0	0	0	0	(	)	0	0	0	0	0	0	0	0	0	0	0	0
06:00-09:00	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0
15:00-19:00	1323	1280	39	4	0	0	2	8	7:	2 40	12 5	69	230	35	4	1	0	28	108	63	28	59	71
06:00-22:00	1693	1649	40	4	0	0	2	8	8	4	15 7	52	294	50	4	1	0	28	108	63	53	63	72
00:00-24:00	1796	1750	41	5	0	0	2	8	94	1 51	18 7	94	322	52	4	1	1	28	115	63	55	63	72

**Extended report page 6** (total number of pages) = 4+n, where n=number of measurement days)

John Doe Ltd.	SDR	1 (Direc	ction: B	oth)								_								power	40 ey C	data	208062
Time		Σ	AUTO	LKW	LZ	10	20	30	40	50	60	70	80	50	100	110	>110	Vmin	Vmaa	Vavg	V15	V50	V85
2010-12-21 00	100	23	23	0	0	0	0	0	0	2	3	12	6	0	0	0	0	46	78	65	59	65	73
2010-12-21 01	:00	17	16	1	0	0	0	0	0	2	2	7	4	2	0	0	0	47	80	66	50	66	80
2010-12-21 02	:00	28	25	3	0	0	0	0	0	2	2	11	8	3	2	0	0	48	98	71	61	70	81
2010-12-21 03	00	10	7	3	0	0	0	0	0	0	3	2	3	2	0	0	0	51	89	68	58	72	81
2010-12-21 04	00	23	10	7	0	0	0	0	0	3	4	6	8	2	0	0	0	43	80	67	58	68	80
2010-12-21 05	00	49	42	5	2	0	0	0	0	2	12	22	9	4	0	0	0	44	87	00	57	66	76
2010-12-21 06	00	152	145	0	1	0	0	1	1	13	31	73	31	2	0	0	0	27	87	63	53	65	74
2010-12-21 07	:00	321	300	21	0	0	0	0	0	19	82	122	86	11	1	0	0	41	94	65	56	65	74
2010-12-21 08	:00	311	293	13	5	0	0	0	0	14	60	131	85	19	1	1	0	41	107	00	57	66	76
2010-12-21 09	:00	345	324	19	2	0	0	1	0	0	77	159	79	14	3	0	0	22	99	05	58	65	76
2010-12-21 10	100	358	339	17	2	0	1	0	0	12	96	141	91	16	1	0	0	16	98	65	55	65	75
2010-12-21 11	:00	347	328	19	0	0	0	1	1	14	65	108	73	24	1	0	0	24	96	60	-58	60	76
2010-12-21 12	00	388	367	18	3	0	0	0	4	11	91	104	80	24	7	1	0	33	101	60	57	66	76
2010-12-21 13	00	149	146	1	2	0	0	0	0	10	27	70	34	8	0	0	0	42	90	65	57	66	73
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00:00-00:00	150	129	19	2	0	0	0	0	11	26	0	0	38	13	2	0	0	43	98	67	43	43	43
00:00-09:00	784	738	40	0	0	0	1	1	40	17.	3 32	10 2	02	32	2	1	0	27	107	65	27	27	00
15:00-19:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:00-22:00	2371	2242	114	15	0	1	3	12	99	52	10	28 8	565	118	14	2	0	16	107	65	54	65	75
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## 14 Account management on myTrafficData

#### 14.1 Profile

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Quick Start	Your Profile	
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	AD/DOIN NUMI	Value
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	Institution	arter Doe Do.
Instruments	Department	frame Engeneering
	name	10hr Doe
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otate	Street	Main Street 1
mfiguration	POLIDE CODE	12945
terval Bins	Current	Models Jown
lange password	Country	Usideo Angeoer
	Price	144-1239 (0/8-3
	Websitz	
	time zone	caroperconoon
		🥜 Changa

Here you will find your personal details and information on your organisation. This information is displayed in each generated report.

#### 14.2 Configuration

Here you can change over between km/h and mph for the evaluation.

Furthermore you can specify another aggregate under **user-defined analysis value**, which you can then select for evaluation. Example: 35 for v35.

e • <u>Account</u> • Configuration		Welcome, John Doe ( <u>Profile</u> )
Quick Start	Your Configurat	ion
Files	four comgarat	
104	Attribute Name	Value
	Interval 1	midnight - 6 a.m.
	Interval 2	6 a.m 9 a.m.
Instruments	Interval 3	3 p.m 7 p.m.
and the second	Interval 4	6 a.m 10 p.m.
Account	V-metric	km/h
file	Length metrics	meter
ofiguration	V custom	0
	TXT Date Format	-
nfiguration rerval Bins	V custom TXT Date Format	-
	Online Mode Display	Classes

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#### 14.3 Bins

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					Count .

Standard bins are available. You have the choice to create a new class set, to edit available class sets or delete them. In order to create a new class set please click on the button "**+speed**"

#### 14.3.1 Speed Bins

In order to create a new class set please click on the button "+speed"

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Halor (Local) (Ska (AM				www.enderbook.charlis Laking Caraba Charact Characteric Character
+ 💿 Quick Start	Add Km	h Interval Bin		
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Production     General     Service:				

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In this form you can create a new division for the table of the **speed class** and the **speed class histogram**.

Designation	Description
Name	Name of length bin
Set as default	If this checkmark is set, the defined length bin will be the standard bin in the Webreport. Otherwise you can choose the length bin via the pull-down-menu (recommended).
Interval Name	Name of the interval e.g. private vehicle
Start (>=)	Start of the interval. Note that you must use a period/full stop (.) as the decimal separator.
End (<=)	End of the interval. Note that you must use a period/full stop (.) as the decimal separator.

Ensure that the intervals do not overlap, e.g. if one interval ends at 2.4 the following interval must not start before 2.5.

As soon as you have entered the values for the first interval, you will be given the opportunity to enter another interval.

One speed class set can comprise a maximum of 12 intervals.

#### 14.3.2 Length Bins

In order to create a new class set please click on the button "+length"

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In this form you can create a new division for the table of the **length class** and the **length class histogram**.

Designation	Description
Name	Name of length bin
Set as default	If this checkmark is set, the defined length bin will be the standard bin in the Webreport. Otherwise you can choose the length bin via the pull-down-menu (recommended).
Interval Name	Name of the interval e.g. private vehicle
Start (>=)	Start of the interval. Note that you must use a period/full stop (.) as the decimal separator.
End (<=)	End of the interval. Note that you must use a period/full stop (.) as the decimal separator.

## Ensure that the intervals do not overlap, e.g. if one interval ends at 7 the following interval must not start before 7.1.

As soon as you have entered the values for the first interval, you will be given the opportunity to enter another interval.

One length class set can comprise a **maximum of 4 intervals**.

#### 14.4 Change password

Here you can change your password for your <u>www.myTrafficData.com</u> access.

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## 15 Flash upgrade function

As soon as a software upgrade is available, your SDR can be upgraded via DataCollector.

After you order the software upgrade, an upgrade file is made available to you at <u>www.myTrafficData.com</u>. Log in at <u>www.myTrafficData.com</u> and select the menu item **SDR** on the left side under **Instruments**.

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L Scan NG	8	12051199204-051	Terpto Rike	iyee.	Sathaux Kersen 2	

Now, select the desired device.

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Oulck Start	Main Street (SDR)			
	🔿 ActiveSion - 💽 Inlog 🖉 Setup			
	Attribute Name		Value	
	Configuration number		1310F42678 00NL019	
Marco 1	Version		7.40	
oli beb	Mode of operation		Traffic+	
()(K) (C)(2)	Blaeboth		yes.	
50.00	GPRS		180	
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DataCollector	name	version	Lotte	
Smartphone	Transie SDE 45.1	n.5	3.4y 50, 2014, 4:59 p.m.	

Next, click on the Upgrade.

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A new window opens. Here, you can download the current upgrade file and save it on the SD card. You can now use the DataCollector to transfer the upgrade to your SDR.

**Attention!** Please note that the upgrade file is device-specific, i.e. it can be transferred, using the DataCollector, only to the corresponding SDR.

Step	Description	DataCollector Symbol	Display duration
1	Performance of the intro – see chapter 10	-	approx. 2sec
2	After the intro the white LED in the GetData button prompts you to press it by flashing.	Č C	approx. 15sec
3	Scan for <i>Bluetooth</i> <sup>®</sup> -enabled devices (DSD, SDR) if the DataCollector's internal memory does not already show such devices. The scan process is visualised by the fast flashing of the <i>Bluetooth</i> <sup>®</sup> LED. As soon as a <i>Bluetooth</i> <sup>®</sup> contact is established to a device, the fast flashing of the LED switches to continuous illumination.	<ul> <li>No.</li> /ul>	approx. 45sec
4	Communication establishment to the now connected device is shown by a slow flashing <i>Bluetooth</i> <sup>®</sup> LED.	<ul> <li>Normalization</li> /ul>	approx. 5sec





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Step	Description	DataCollector Symbol	Display duration
5	The successfull connection to the SDR is shown through a flashing of both SDR LEDs.		approx. 5sec
6	Now, the upgrade file is transferred to the DSD. This is signalled by faster flashing of the now red SD card LED.	* * * *	approx. 20sec
7	This is followed by a faster flashing of the now red <i>Bluetooth®</i> LED	* * *	approx. 20sec
8	As soon as the upgrade process is completed the green battery LED lights up. Then the DataCollector automatically switches off (Auto off).		approx. 3sec
9	The successful upgrade is shown through a permanently lit up upper SDR LED.	SDR CREATER	approx. 3sec

After the successful update the files on the SD card will be deleted and the DataCollector automatically turns off. If an error occurs during the transfer the DataCollector indicates this by fast flashing of the SD card LED in red. In this case, you should contact the support department at DataCollect: <a href="mailto:support@datacollect.com">support@datacollect.com</a>

## Do not disconnect the device from the power supply during the upgrade process! The maximum distance between the DataCollector and SDR is 10m, with eye contact.

Finish by reconnecting the DataCollector with the SDR and downloading the latest device file. Activate the SDR again at <u>www.myTrafficData.com</u> in order to view the current software version.

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## 16 Technical data DataCollector

Technical Data	Support only for SDR Version ≥ 6.0
Bluetooth®	Class1
Range (line of vision) [m]* (clear visual contact required)	80
Baud rate [bit/s]*	115200
Download time @ 10.000 Vehicles [min]*	~1
Download time @ 50.000 Vehicles [min]*	~2,5
Download time @ 100.000 Vehicles [min]*	~6
Range Blutetooth [m] '*	
Frontal	80
Right	50
Left	50
Rearside	50









\* Clear visual contact required (Line of sight)



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## 17 Technical data of the SDR

Technical data	Value		
Sensor:	Microwave24,125GHz, output power 5mW,France:Limited to 24,075GHz / typ. 24,125GHz / max. 24,175GHzUnited Kingdom:Limited to 24,150GHz / typ. 24.200 GHz / max. 24,250GHz		
Speed measuring range:	3-199km/h or 2-130mph		
Weight SDR:	4,7kg (without battery)		
Ambient temperature:	-20°C to + 50°C		
Housing:	PP, PC		
Case dimensions (WxHxD):	300 x 350 x 150mm		
Units	Metrical or English (imperial)		
Data rate:	up to 115200Baud		
Memory:	512kB (RAM buffered) + memory card		
Standard data format:	binary		
Optional data format:	V, date (dd:mm:yyyy), time (hh:mm:ss), direction (single car), length		
Resolution:	Speed 1km/h; Length 0,1m		
Setting:	via DataCollector + SmartPhone App + myTrafficData		
DataCollector BT range:	Frontal up to 80m (clear vision required)		
Calibration	automatically		
Installation angle:	horizontally 45°, vertically 90°-60° (adjustable)		
Installation Roadside distance:	Up to 10m (without prior settings – up to 3m)		
Installation height:	Up to 8m (without prior settings – up to 2m)		



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### 18 System requirements for www.myTrafficData.com

In order to ensure pleasant working with the <u>www.myTrafficData.com</u>, you should use one of the following browsers:

- Google Chrome (at least version 4.0)
- Firefox (at least version 3.6)
- Internet Explorer (at least version 7.0)

The following functions should be activated in your browser settings:

- **JavaScript** (used for the interactive interface)
- Cookies (used for login sessions)

Furthermore, the use of one of the following operating systems is recommended:

- Microsoft Windows (at least XP)
- Ubuntu (at least version 10.0)
- Mac OSX

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## **19 Frequently Asked Questions (FAQ)**

#### **General FAQs**

1. Question: I have registered with <u>www.myTrafficData.com</u>, but have not yet received a password.

**Answer**: Our employees must first enable you on <u>www.myTrafficData.com</u>. The password will then automatically be sent to you by e-mail.

2. Question: <u>www.myTrafficData.com</u> is not being correctly displayed.

**Answer**: You have selected a secure connection to <u>www.myTrafficData.com</u>. You will recognise this by the s in https://www..... In order to correctly display the website you must allow the display of mixed contents via your browser. If you do not need a secure connection, then please delete the "s" from https at the beginning of the Internet address.

**3. Question:** There are several files with measured data on my SD card – which is the right one?

**Answer:** The measured data is named after the measuring point. If a file with that name should already exist, further data is consecutively numbered.

Example: mainstreet.sdr and mainstreet1.sdr

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#### FAQ DataCollector

**1. Question:** My SDR is not displayed under Instruments.

**Solution:** Make sure that you have activated your SDR properly on <u>www.myTrafficData.com</u>.

- Question: Can I save setup files for several SDRs at the same time on the SD card?
   Solution: Yes. As the setup files are instrument-specific, it is ensured that the right file is always transferred.
- 3. Question: My data is not saved on the SD card!

**Solution**: Please check whether the SD card was inserted correctly in the DataCollector. The SD card must be inserted with the printed side facing down and it must completely disappear within the DataCollector.

4. **Question:** The SD Card of the DataCollector is not writable!

**Solution**: Format the SD Card with the DataCollector (see User Manual DataCollector - Chapter – 15.1)

5. **Question:** A bluetooth<sup>®</sup> connection to the SDR ist not possible!

**Solution**: Delete the internal *bluetooth*<sup>®</sup> memory (see User Manuel Chapter – 15.2). Should the problem still persist please contact our Support: <u>support@datacollect.com</u>

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## 20 Disposal

Please dispose of this product at the end of its service life in accordance with the valid statutory requirements and make use of the return system for used batteries.

**datacollect**\*

## 21 Protective rights

The following trade name and patent rights of DataCollect Traffic Systems GmbH are available

Logo DataCollect

for this product range:

DataCollect

SmartBracket



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## 22 Certifications

## 22.1 FCC and IC

This device complies with Part 15 of the FCC Rules [and with Industry Canada licence-exempt RSS standard(s)].

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### Radiofrequency radiation exposure Information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 100cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# CE

## EG-Konformitätserklärung Declaration of Conformity EC



Hersteller: Manufacturer:

Produkt: Product:

Typ: Type:

Artikelnummer: Item number: DataCollect Traffic Systems GmbH Heinrich-Hertz-Straße 1 50170 Kerpen

Seitenradarmesssystem Movement Detection

SDR (Radar/Bluetooth)

7200-0033 / 7200-0034

Richtlinie: Directive: 1999/5/EG 1999/5/EC

Hiermit wird bestätigt, dass das oben bezeichnete Produkt den Schutzanforderungen entspricht, die in den Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EU-Mitgliedsstaaten über die elektromagnetische Verträglichkeit festgelegt sind.

It is herewith confirmed that the above mentioned product complies with the requirements set out in the Council Directive on the Approximation of the Laws of the Member states relating to Electromagnetic Compatibility.

Folgende Normen wurden herangezogen:

The following standards were applied:

EN 60950:2000 EN 300440-1V1.3.1 EN 300440-2V1.1.1 EN 50371:2002 EN 300328 V1.7.1 EN 301489-1 V1.8.1 EN 301489-17 V2.1.1

Diese Erklärung wird verantwortlich abgegeben durch: This declaration is submitted by:

lataen

Kerpen, Datum

01.07.2005

Unterschrift

Geperal Manager Dipl.-Phys. Dirk Overzier

## CE

## EG-Konformitätserklärung Declaration of Conformity EC



## Anhang Annex

Allgemeine nationale Hinweise (Einschränkungen) General national Information (Restrictions)

Bewegungsmelder Movement Detection 24,05 – 24,25 GHz 24.05 – 24.25 GHz

Land Country Einschränkung Restriction

Frankreich France

Vereinigtes Königreich United Kingdom Begrenzt auf min. 24,075GHz / typ. 24,125GHz / max. 24,175GHz Limited to min. 24.075GHz / typ.24.125GHz / max. 24.175GHz

Begrenzt auf min. 24,150GHz / typ. 24,200GHz / max. 24,250GHz Limited to min. 24.150GHz / typ. 24.200GHz / max. 24.250GHz

DataCollect Traffic Systems GmbH Heinrich-Hertz-Str. 1 50170 Kerpen Germany

Tel.: +49(0)2273 5956 - 0 Fax: +49(0)2273 5956 - 23 E-mail: <u>info@datacollect.com</u> <u>www.DataCollect.com</u> <u>www.myTrafficData.com</u>