



Evaluate, React, and Decide



Software Collector / SmartView3

Functions:

Web based visualization and data collection software for Lufft dataloggers/transmitters

Storage of data in database

Flexible export and import functions for integration of external/third party software/data (CSV and XML)

Simultaneous data collection via unlimited communication modules (e.g.modems)

Integration of webcam pictures (via TCP/IP-FTP)

Basis version Collector
(Collector for up to 5 stations)
Order No.: 8160.COLLECT05

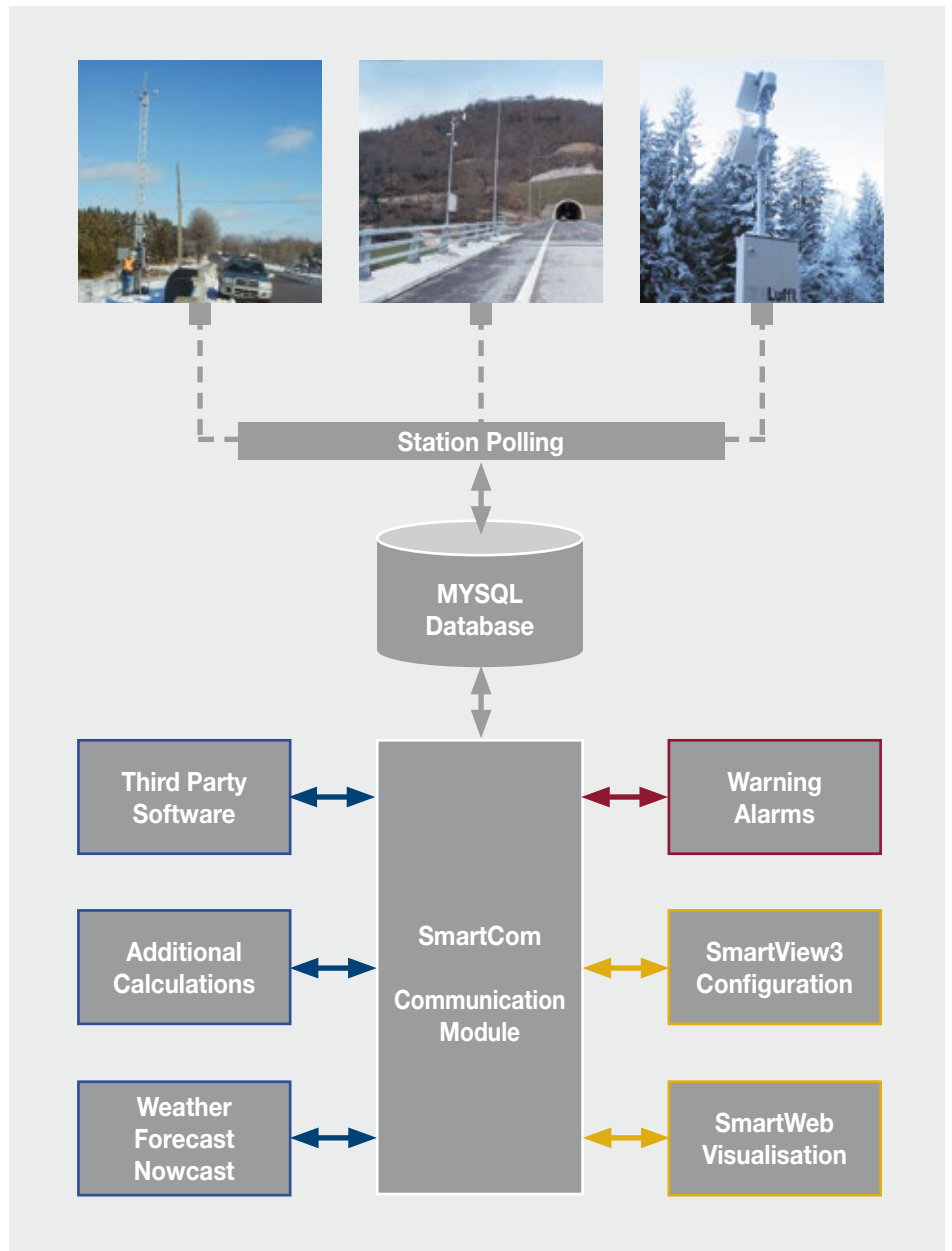
Unlimited version Collector
(unlimited quantity of stations)
Order No.: 8160.COLLECT

SmartView3 incl. Collector
up to 5 stations
Order No.: 8040.SV05

SmartView3 incl. Collector
unlimited
(Web visualization)
Order No.: 8040.SV300

New functions:

- Extremely flexible alarm (SMS, email, voicemail)
- 6 hours forecast module



A screenshot of the Lufft software interface showing the configuration settings. The interface is divided into several sections: 'General Settings', 'Communication Settings', 'Location Information', and 'Advanced Settings'. Each section contains various input fields and checkboxes for configuring the data collection system.



Measurements

Please note:

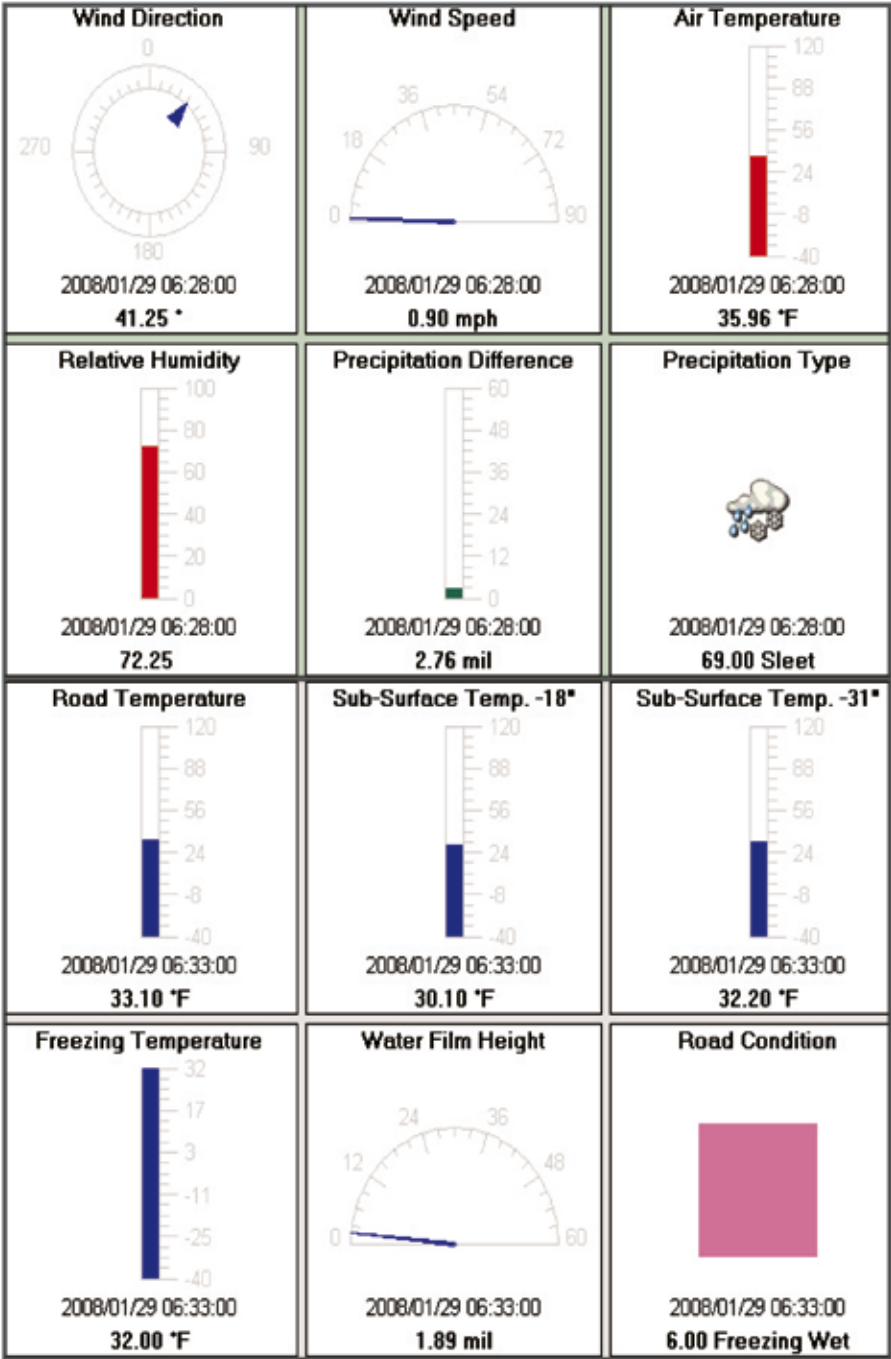
- Road surface temperature below 0 degrees Celsius and below dew point causes frost.
- Liquid precipitation (rain) on frozen ground causes black ice (subsurface road temperature below 0 degrees Celsius).



Integration of a camera image into the visualization

Graphical displays (day and week charts)

Measurement data in tabular form



SmartView3 Functions Overview

Functions Overview of SmartView3 1.8.2 (as of 2011)				
	Collector (Basic)	Collector (Unlimited)	Full (up to 5 stations)	Full (up to 300 stations)
Data transfer				
Quantity of weather stations	max. 5	unlimited	max. 5	unlimited
Types of stations				
Station type Opus200 (on-and offline)	■	■	■	■
Station type Opus2 (on-and offline)	■	■	■	■
Station type UMB (online)	■	■	■	■
Station type HP100 (offline)	■	■	■	■
Read sensor configurations	all types	all types	all types	all types
Change sample and storage rate and memory mode (Min/Max/ave)	for OPUS200	for OPUS200	for OPUS200	for OPUS200
Station type "import"	■	■	■	■
Station type "TLSoIP"	■	■	■	■
Station type "Boschung TLS"	■	■	■	■
Station type „MSSI“	■	■	■	■
Station type „NTCIP“	■	■	■	■
Transfer camera picture via FTP	■	■	■	■
Transfer camera picture via HTTP	■	■	■	■
Transfer camera picture via MSSI	■	■	■	■
Transfer camera picture via NTCIP	■	■	■	■
Connections				
Direct (RS232)	■	■	■	■
TCP/IP (Station with COM Server or CDMA/GPRS Modem with fixed IP address or DynDNS support)	■	■	■	■
Modem (TAPI)	■	■	■	■
PPP (camera picture only)	■	■	■	■
PPP (for NTCIP)	■	■	■	■
Intervals				
Fixed (e. g. every 20 minutes)	■	■	■	■
No transfer at special night periods (e. g. not between 10.00 p.m. and 5.00 a.m.)	■	■	■	■
Special times	■	■	■	■
Modem poll				
Max quantity of modems	unlimited	unlimited	unlimited	unlimited
"Modem Pools" (poll stations with dedicated modems)	■	■	■	■
Recalculation of values				
Re-scale data before storing in the database	■	■	■	■
Mapping of data before storing in the database (e. g. change of road conditions codes)	■	■	■	■
Clock synchronization				
Synchronization of device clock (datalogger) through PC clock device clock can be UTC or local time (with or without summertime adjustment)	■	■	■	■
Calculation channel				
Calculation of sensor data as "calculation channel" according to delivered raw data. Immediately: scale of raw data for a configurable coefficient, generation of sum/average/minimum value/maximum value for a specific period of time, mapping of the values	■	■	■	■
Logic sensor types				
Same presentation of channels of different stations such as OPUS200 and OPUS208 and UMB	■	■	■	■
Hide/delete measured values of channels dependent upon another channel (e.g. hide freezing point if no residual salt is detected)	■	■	■	■

SmartView3 Functions Overview

Functions Overview of SmartView3 1.8.2 (as of 2011)				
	Collector (Basic)	Collector (Unlimited)	Full (up to 5 stations)	Full (up to 300 stations)
Backup/archive of data				
Time-controlled automatic backup of full database	■	■	■	■
Time-controlled deletion of old data in database (including backup of data before deletion starts)	■	■	■	■
Time-controlled compression of data in the database including backup before compression starts (reduc- tion of data down to one value per hour/day)	■	■	■	■
Time-controlled deletion of "old" camera pictures in the database (including backup of data before deletion starts)	■	■	■	■
Restore of backup-data - including deletion of com- pressed data before restoring process starts (if the backup is the result of a data compression)	■	■	■	■
Automatic transfer of backup-file onto a server via FTP	■	■	■	■
User access administration				
Administration of users / functions and user groups	■	■	■	■
Admission to functions for users/groups	■	■	■	■
Create/delete stations	■	■	■	■
Edit/view configuration of a station	■	■	■	■
Create/delete website			■	■
Change configuration of website			■	■
Edit/view configuration of website			■	■
Create/change user	■	■	■	■
Change configuration data of software	■	■	■	■
Export/Import				
Manual Export/Import			■	■
Automatic Export/Import			■	■
Export of configurable values of one or more stations in one file			■	■
Export in "CSV" format incl. parameter settings			■	■
Import in "CSV" format incl. parameter settings			■	■
Export as a "Hex Dump of a TLS Telegram"			■	■
Export in "XML" format incl. parameter settings			■	■
Scale of data for export (e. g. recalculation of m/s into km/h)			■	■
Mapping of data for export (e. g. recalculation of road conditions codes)			■	■
Scale of import-data before storing the data in the database			■	■
Mapping of import-data before storing the data in the database			■	■
Configuration of export/import jobs (mainly for plan disease calculations)			■	■
Different export-import modules such as disease calculation models, dew point calculation, road forecast (24h)			■	■
External software modules for Export/Import				
External software module for the dew point and vapo- ration pressure calculation			■	■
External software for the combined road condition calculation			■	■
External software for the calculation „alarm road condition“			■	■

Functions Overview of SmartView3 1.8.2 (as of 2011)				
	Collector (Basic)	Collector (Unlimited)	Full (up to 5 stations)	Full (up to 300 stations)
External modules for agricultural applications				
Apple Scab (<i>Venturia inaequalis</i>)	■	■	■	■
Onion: Downey Mildew (<i>Peronospora destructor</i>)	■	■	■	■
Onion: Neck Rot (<i>Bortyis squamosa</i>)	■	■	■	■
Carrot Alternariosis (<i>Alternaria dauci</i> , <i>A. radicina</i>)	■	■	■	■
Potato: Late Blight (<i>Phytophthora infestans</i>)	■	■	■	■
Fire Blight (<i>Erwinia amyloflora</i>)	■	■	■	■
Strawberry: Grey mould (<i>Botrytis cinera</i>)	■	■	■	■
Beetroot: Leaf Spot (<i>Cercospora spp.</i>)	■	■	■	■
Grape Vine Downey Mildew (<i>Plasmopara viticola</i>)	■	■	■	■
Grape Vine Powdery Mildew (<i>Unicula necator</i>)	■	■	■	■
Bortyis Bunch Rot (<i>Botrytis cinerea</i>)	■	■	■	■
Seljaninov Hydrothermal Coefficient	■	■	■	■
Calculation channels				
Internal calculation of sensor data as “calculation channel” according to imported raw data. Scale of raw data for a configurable coefficient, generation of sum/average/minimum value/maximum value for a specific period of time; differential calculation with previous value; mapping of the values in a configurable table			■	■
Control of automatic import/export				
Export if new data has been stored			■	■
Time-controlled export (e.g. every 5 minutes)			■	■
Flexible definition of time-interval for export based on start-uptime			■	■
Export and execution of a software program			■	■
Export and automatic transfer of a file via FTP			■	■
Export and execution of a software program and import of the calculated result (e.g. disease model calculation)			■	■
FTP transfer of files before import starts			■	■
Time-controlled FTP transfer of files including “Wildcard” support			■	■
Automatic deletion of files transferred via FTP after transfer has been finished			■	■
Import of files including “Wildcard” support			■	■
Automatic deletion of import files after import has been finished			■	■
Visualization of data as “website”				
Indication of station’s status (last data transfer, transfer success) in a table			■	■
Indication of station’s status (last data transmission, transfer success) on a static map			■	■
Indication of (selected) sensor data in a “pop-up” window by “scroll over” with the mouse on a station, on the static map			■	■
Indication of status-information and current values of stations on “stations-page” per station			■	■
Indication of camera-picture on “stations-page” of a station			■	■
Graphic indication of the current value on the “station page” in the form of an analog-instrument			■	■
Indication of reports (day/month/year) with sum/average and extreme values during the report period of time, on the “station page”			■	■
Automatic generation of “data pages” to indicate the data in the given time interval, day/week/month/year (diagram and table)			■	■

SmartView3 Functions Overview

Functions Overview of SmartView3 1.8.2 (as of 2011)				
	Collector (Basic)	Collector (Unlimited)	Full (up to 5 stations)	Full (up to 300 stations)
Visualization of data as “website”, <i>continued</i>				
Selectable “data pages” including current values from sensors of different stations and different storage intervals (day/week/month/year) on one page			■	■
Selectable line and status (bar) diagrams on “data-pages”; line diagrams with up to 4 different Y-axes (units). Scale of line diagrams manually or automatically-no other periods.			■	■
Indication of reports (depending on configured period for the station pages) with average/sum and extreme values on the period of time, on the station page			■	■
Management of “pages-archive” for data pages (historic measurements)			■	■
Automatic transfer of admission rights on to website/webserver (cia .htaccess – function has to be active on web-server)			■	■
Automatic erasure of archive pages prior to configured period of time			■	■
Free configuration of text elements for data pages and stations pages			■	■
Archive of pictures			■	■
Easy configuration of stations pages and data pages via templates			■	■
Overview-table with current readings of all stations			■	■
Configuration of time-offsets for stations in different time zones			■	■
Group-status page(s) with sensor values and camera pictures			■	■
Freely configurable diagrammes with data from the last 12/24 hours on the stations’ pages			■	■
Optional hide function of “non-available” measured values (e.g. residual salt with TLS)			■	■
Several linked map layers			■	■
Separate configuration of „pop-up information“ to the stations (sensor value) from the overview table			■	■
Option of several overview tables (per map representation)			■	■
Optional automatic adjustment of map size to browser window			■	■
„Only camera“ stations (stations without sensors)			■	■
Identification of stations with cameras /only camera on the map representation with corresponding icons			■	■
Menu optionally as a „hierarchical pop-up menu“			■	■
Nested/hierarchical grouping of stations in the pop-up menus			■	■
Warnings and alarms				
Configuration of high and low threshold per sensor; generation of warnings/alarms if value is out of limits			■	■
Alarm message if station cannot be polled			■	■
Alarm message if import file cannot be used			■	■
In case of alarms, generation of email message (station could not be polled, sensor delivers error, sensor delivers error value/import, sensor delivers error / import, sensor delivers alarm value) to one or more destination addresses			■	■
Warning/alarm based on a condition value (road state)			■	■
SMS messages including alarm/warning contents to one or multiple destinations			■	■
Warning/alarm in case of violating selected thresholds			■	■
Selectable time frames for SMS alarms transmissions			■	■
Configuration of minimum time intervals between alarm messages			■	■
Configuration of time to repeat alarm messages			■	■