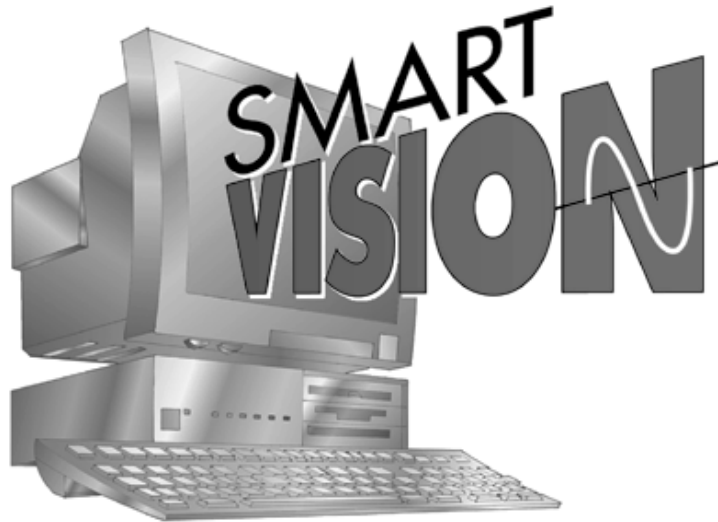


10/63-1.20 EN



- **Diagnostics and remote diagnostics of instruments**
- **Automatic documentation and documentation storage**
- **Display of dynamic data**
- **Structuring by user groups – on request with password protection**
- **Designed according to the operating concept for all intelligent field instruments (VDI/VDE 2187)**
- **Supports the Field Device Tool concept (FDT) and Device Type Manager (DTM) for HART and PROFIBUS**
- **For use with all HART instruments also if no DTM is available**
- **Support of FOUNDATION Fieldbus**
- **Support of bus structures, e.g. FSK bus**
- **Configuration and parameterization of instruments online and offline**
- **Automatic device recognition**
- **Instrument-specific parameterization masks in uniform presentation**
- **Online help – any time with a keystroke**
- **Operational with operating systems Windows 95/98 SE, NT, 2000**
- **90-day demo version free of charge**

**Technical data**

**General description**

SMART VISION® is a universal, graphical management software for intelligent field instruments and provides intuitive handling.

SMART VISION® communicates with all HART-capable instruments that support universal and common practice HART commands. With ABB instruments the proprietary HART commands are supported additionally, so the complete functionality of each instrument is at your hand.

SMART VISION® supports HART and PROFIBUS DTM's as well as all other PROFIBUS instruments within the scope of the profile specifications 2.0/3.0.

Furthermore, SMART VISION® supports the communication with FOUNDATION Fieldbus.

**SMART VISION is used for**

- Configuration and parameterization of field instruments
- Device diagnostics with status report
- Visual device overview as a copy of plant device communications
- Saving/management of device data
- Planning and administration of device tags
- Multi-visual online display of instrument data (information concerning measurement values, diagnostics, configuration, parameterization, status)

**PC/Notebook requirements**

**Minimum equipment**

- Intel-Pentium II processor 233 MHz or compatible
- 64 MB main RAM
- 50 MB free hard disk space
- Microsoft Windows 95, NT 4.0 with service pack 5
- Internet Explorer 5.0

**Recommended equipment**

- Intel-Pentium III processor 450 MHz or compatible
- 128 MB main RAM
- 50 MB free hard disk space
- Windows NT 4.0 with service pack 5 or 6a
- Internet Explorer 5.0

**Functionality/Special features**

**Management**

- Management of devices and device networks in projects.
- Definition of projects by means of a graphical interactive project editor.
- Definition and assignment of tag names in the project editor.
- Automatic allocation of names, addresses and multiplexer channels.
- Easy selection of instruments by simple clicking on the corresponding project entry.
- Instrument recognition via tag number or address.
- Simultaneous communication to several field instruments.
- Contrans I scan procedure to ascertain connected HART instruments.

**Parameterization**

- On-/offline configuration and parameterization of smart field instruments.
- Upload of device data:  
read parameterization and configuration information from the instrument.
- Download of device data:  
reload stored device data to the instrument.
- Detailed, specialized device data windows for complete parameterization of all integrated field instruments.
- Basic parameterization for all HART 5.1 compatible field instruments (HART Universal).
- Parameterization for all PROFIBUS DPV1, PROFIBUS PA instruments.

**Online display of measuring and status information for each device**

- Numerical
- Bargraph with alarm limits
- Trend recorder with scaleable time axis
- Instrument status with error export functions
- With DTM instrument specific indicators are used instead of the standard indicators.

**Archiving**

- Save instrument data onto a Windows compatible storage device (floppy disk, hard disk, streamer, CD-ROM, etc.)
- Save project data

**Documentation**

- Printing device data
- Printing diagnostics information
- Printing a SMART VISION project.

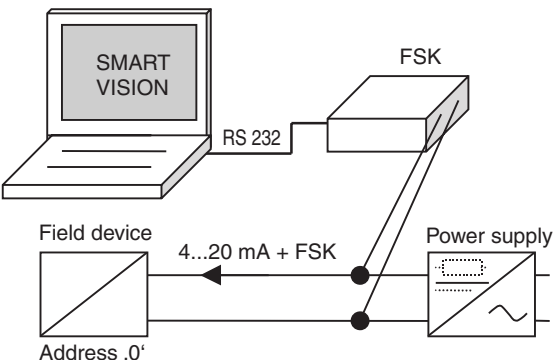
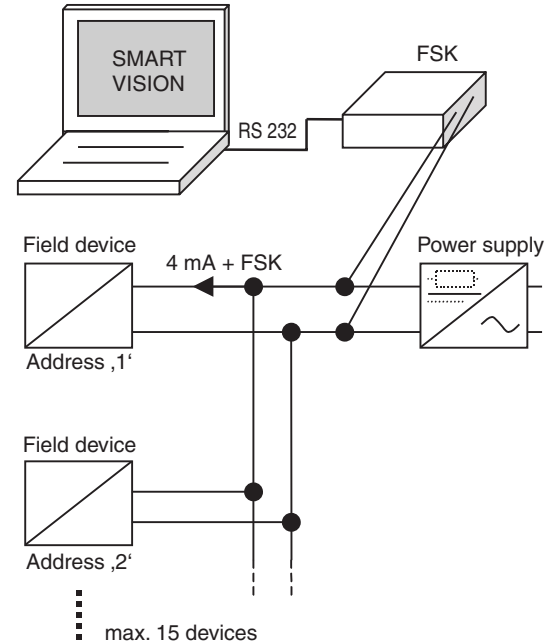
**Miscellaneous**

- Password protection, e.g. for the download of instrument data
- Simultaneous use of (e.g.) 4 serial COM interfaces and 4 PROFIBUS lines on one PC/Notebook to connect field instruments
- Integrated comment and note functions for each device
- User interface designed according to VDI/VDE 2187 rules
- Full support of ABB HART multiplexer's cascading capability by card address and channel number
- Integrated HART multidrop capability
- Simultaneous display of several measurement value windows, of data input/output or configuration windows

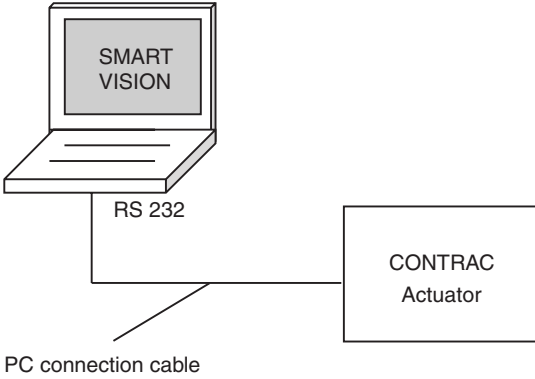
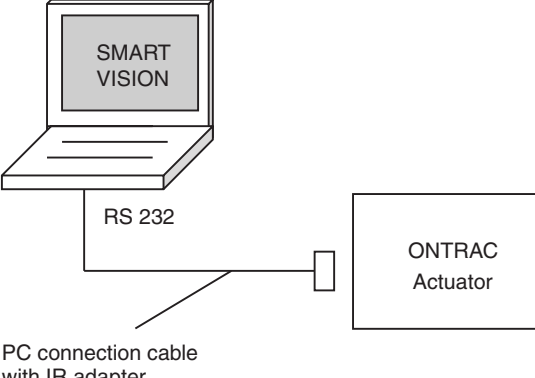
Comprehensive help functions are available in every place of the program.

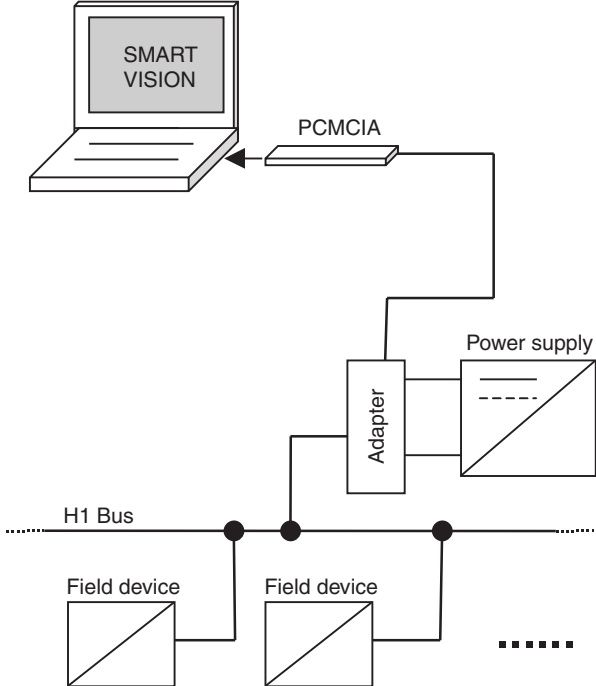
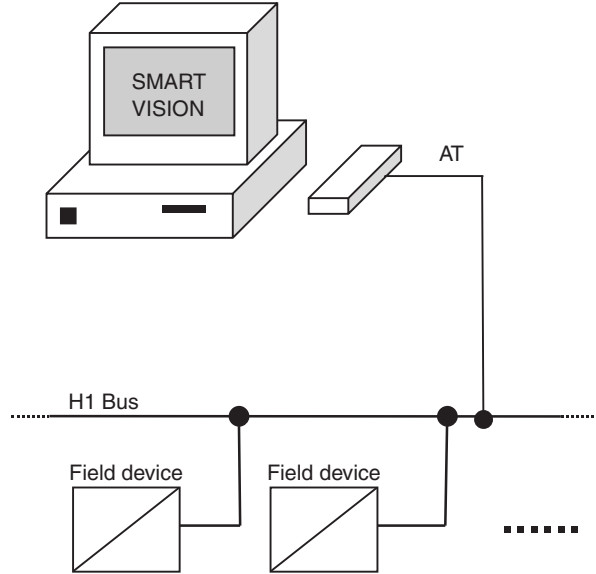
Connection PROFIBUS DP/PA via PCMCIA (Notebook)			
	Description	Catalog No.	Data Sheet
<p>*Terminating resistor must be switched on</p> <p>SMART VISION</p> <p>PCMCIA</p> <p>Adapter</p> <p>DP* plug</p> <p>Controller (optional)</p> <p>PROFIBUS DP</p> <p>Field device DP</p> <p>Field device DP</p> <p>PROFIBUS DP</p> <p>Segment coupler DP/PA</p> <p>T connector</p> <p>PROFIBUS PA</p> <p>Field device PA</p>	<p><b>SMART VISION</b></p>	63111-9820026	63-1.20 EN
	<p><b>ADN 101</b>            PCMCIA/PROFIBUS DP Adapter, 1 channel (Adapter included)</p>	63641-9890001	63-6.41 EN
	<p><b>PCO 011</b>            DP plug, max. 12 MBaud, 35° cable outlet, connectable terminating resistor</p>	72781-9101595V	63-6.44 EN
	<p><b>PROFIBUS DP cable</b>            see Data Sheet</p>		63-6.46 EN
	<p><b>ABB Field devices for PROFIBUS DP</b>            see Data Sheet</p>		63-0.47 EN
	<p><b>SDK 100-Ex</b>            PROFIBUS Segment coupler DP/PA for [EEx i] PA 31.25 kBit/s to DP 93.75 kBit/s</p>	63642-9890042	63-6.41 EN
	<p>or</p>		
	<p><b>SDN 100</b>            PROFIBUS Segment coupler DP/PA for non [EEx i] PA 31.25 kBit/s to DP 93.75 kBit/s</p>	63642-9890043	63-6.41 EN
	<p><b>Installation suggestions for PROFIBUS PA components</b>            see Data Sheet</p>		63-0.40 EN
	<p><b>ABB Field devices for PROFIBUS PA</b>            see Data Sheet</p>		63-0.46 EN

Connection PROFIBUS PA via USB (Notebook/Desktop)			
	Description	Catalog No.	Data Sheet
	<b>SMART VISION</b>	63111-9820026	63-1.20 EN
	<b>ADN 121</b> USB/PROFIBUS DP Adapter, 1 channel	63641-9890002	63-6.41 EN
	<b>PCO 011</b> DP plug, max. 12 MBaud, 35° cable outlet, connectable terminating resistor	72781-9101595V	63-6.44 EN
	<b>PROFIBUS DP cable</b> see Data Sheet		63-6.46 EN
Connection PROFIBUS DP/PA via ISA (Desktop)			
	<b>SMART VISION</b>	63111-9820026	63-1.20 EN
	<b>ADN 141</b> ISA/PROFIBUS DP Adapter 1.5 MBit/s, 1 channel 500 KBit/s, 2 channel  or	63641-9890004	63-6.41 EN
	<b>ADN 144</b> ISA/PROFIBUS DP Adapter 500 kBit/s, 4 channel	63641-9890005	63-6.41 EN
	<b>PCO 011</b> DP plug, max. 12 MBaud, 35° cable outlet, connectable terminating resistor	72781-9101595V	63-6.44 EN
	<b>PROFIBUS DP cable</b> see Data Sheet		63-6.46 EN
	<b>DP plug</b> see Data Sheet		63-6.44 EN

Connection HART „Point-to-Point“ via FSK Modem (Notebook/Desktop)			
	Description	Catalog No.	Data Sheet
 <p><b>Note:</b> In case the FSK Modem is used without controller, a 250 Ω resistance is to be used in serial</p>	<b>SMART VISION</b>  <b>HART FSK Modem</b> electrical isolation, IS input [EEx ib] incl. connection cable 4/2 mm and 4/4 mm  or  <b>HART FSK Modem</b> connector version, electrical isolation, connection clips	63111-9820026  63671-9790026  11589-7957838	63-1.20 EN  63-6.71 EN  63-6.71 EN
	<b>Connection HART „Multidrop“ via FSK Modem (Notebook/Desktop)</b>		
 <p><b>Note:</b> in order to work in multidrop-mode, the addresses of the field devices have to be set to zero. This will set the output current to 4 mA.</p>	<b>SMART VISION</b>  <b>HART FSK Modem</b> electrical isolation, IS input [EEx ib] incl. connection cable 4/2 mm and 4/4 mm  or  <b>HART FSK Modem</b> connector version, electrical isolation, connection clips	63111-9820026  63671-9790026  11589-7957838	63-1.20 EN  63-6.71 EN  63-6.71 EN

Connection HART „Contrans I“ via FSK Modem (Notebook/Desktop)			
	Description	Catalog No.	Data Sheet
<p>Max. 1200 devices</p>	<b>SMART VISION</b>	63111-9820026	63-1.20 EN
	<b>HART FSK Modem</b> electrical isolation, IS input [EEx ib] incl. connection cable 4/2 mm and 4/4 mm  or  <b>HART FSK Modem</b> connector version, electrical isolation connection clips	63671-9790026  11589-7957838	63-6.71 EN  63-6.71 EN
	<b>Backplane 8way</b> for installing 8 Contrans I modules, separate fusing for modules and signal circuits, signal processing up to 16 Ex or non-Ex signals  or  <b>Backplane 16way/21way</b> for installing 16/21 Contrans I modules, separate fusing for modules and signal circuits, signal processing up to 32/42 Ex or non-Ex signals, redundant power supply with signal contact	V17111-2xx  V17111-3xx/-6xx	04/17.1 EN  04/17.1 EN
	<b>FSK Bus Amplifier</b> <b>for 16, 21, 32 channels</b> FSK bus design Contrans I modules on standard backplanes, bidirectional transmission of FSK signals according to HART protocol, cost-effective centralized operation, communication with intelligent field units via SMART VISION	V17191-16,-21,-32	04/17.1 EN
Connection HART via LKS Adapter (Notebook/Desktop)			
	<b>SMART VISION</b>	63111-9820026	63-1.20 EN
	<b>LKS Adapter</b> small connector, for positioner, TEU 211/421/471, Contrans I  or  T connector for TS11/01, TEU 211/421/471, Contrans I	11589-0319621  11589-0744009	63-6.71 EN  63-6.71 EN

<b>Connection CONTRAC with CONTRAC cable (Notebook/Desktop)</b>			
	Description	Catalog No.	Data Sheet
	<b>SMART VISION</b>	63111-9820026	63-1.20 EN
	<b>CONTRAC PC connection cable</b>	V68999-746349	68-7.20 EN
	<b>Intelligent Electrical Actuators for continuous control and electronics – CONTRAC</b>		70/68.2 EN
<b>Connection ONTRAC with IR Adapter (Notebook/Desktop)</b>			
	<b>SMART VISION</b>	63111-9820026	63-1.20 EN
	<b>ONTRAC IR Adapter</b>	V78999-789504	78-1.10 EN
	<b>Electrical multi-turn Actuators for ON/OFF operation or Modulating control – ONTRAC</b>		78-1.02 EN
	In case of actuator ordering see at accessories <b>IR Adapter</b>	Code-No. 277	78-1.02 EN

Connection FOUNDATION Fieldbus via PCMCIA (Notebook)			
	Description	Catalog No.	Data Sheet
 <p>The diagram illustrates the connection of a SMART VISION laptop to the FOUNDATION Fieldbus H1 Bus via a PCMCIA adapter. The laptop is connected to the PCMCIA adapter. The adapter is connected to a power supply and the H1 Bus. The H1 Bus is connected to two field devices.</p>	<b>SMART VISION</b>  <b>AFK 101 PCMCIA</b> FOUNDATION Fieldbus H1-Adapter 95, 98, NT4.0, 2000, 31.25 kBits/s, 1 channel (included Adapter and power supply)	63111-9820026  63651-9890201	63-1.20 EN  63-6.51 EN
	<b>Connection FOUNDATION Fieldbus via AT (Desktop)</b>		
 <p>The diagram illustrates the connection of a SMART VISION desktop computer to the FOUNDATION Fieldbus H1 Bus via an AT adapter. The desktop computer is connected to the AT adapter. The adapter is connected to the H1 Bus. The H1 Bus is connected to two field devices.</p>	<b>SMART VISION</b>  <b>AFK 141 AT</b> FOUNDATION Fieldbus H1-Adapter 95, 98, NT4.0, 2000, 31.25 kBits/s, 1 channel	63111-9820026  63651-9890207	63-1.20 EN  63-6.51 EN



<b>Ordering information</b>			
	Catalog No.		
<b>Management Software</b>			
SMART VISION 04.01 CD-ROM (German, English), manual as PDF-file, including SMART VISION 3.01.17 Following the installation the software runs 90 days in demo-mode and needs to be licensed within this period. The license key is to be requested at ABB and will be delivered free of charge. Please refer to the manual.	63111-9820026		
Manual for SMART VISION 04.01, hard cover German English	63161-9820041 63161-9820042		

Order handling: FAX +49 (0)2056/12-5095

<b>Ordering information</b>				
		Catalog No.		
<b>Modules for PROFIBUS instruments</b>				
BasicPA Profile configuration	PROFIBUS DTM	on request		
Temperature transmitter: TF 12 / TF 212	PROFIBUS DTM	63821-9820076		
Pressure transmitter: MV 2000T <sup>2)</sup>	PROFIBUS DTM	63841-9820077		
Flowmeter: TRIO-WIRL	PROFIBUS DTM	63851-9820080		
IDM COPA-XE / MAG-XE	PROFIBUS DTM	63851-9820081		
Positioner: TZID-F	PROFIBUS DTM	63861-9820082		
Remote I/O: S 900 <sup>3)</sup>	PROFIBUS DTM	63831-9820079		
<b>Modules for HART instruments</b>				
HART universal configuration	HART	1)		
Temperature transmitter: TH 02 / TH 102 / TH 202	HART	1)		
TS 01, TS 11	HART	1)		
TEU 211 (IP65), TEU 211 (IP20) a. TEU 421, TEU 471	HART	1)		
TS 02 / TS 102 / TS 202	HART V. 03.01.17	1)		
Pressure transmitter: MV 2000T <sup>2)</sup>	HART DTM	63841-9820051		
600T	HART DTM	63841-9820054		
AS 800	HART	1)		
PTH	HART	1)		
Flowmeter: VORTEX VT1000/VR1000 & SWIRL ST1000/SR1000	HART	1)		
IDM COPA-XE / MAG-XE	HART	1)		
TRIO-MASS	HART DTM	63851-9820053		
Positioner: TZID, TZID-C	HART	1)		
Samsung SR3780	HART	1)		
Positioner: Conrac	HART DTM	63866-9820052		
<b>Modules for HART instruments - SMART VISION 03.01.17 only</b>				
Flowmeter: VORTEX-VM / SWIRL-SM	HART	1)		
IDM MAG-SM1000	HART	1)		
IDM COPA-XM / MAG-XM1000	HART	1)		
IDM COPA-XM / MAG-XM2000	HART	1)		
IDM COPA-XT / DT4000	HART	1)		
V/A 10A5460/65	HART	1)		
<b>Modules for instruments using special protocols</b>				
Interface				
Temperature transmitter: Rueger S95.3U_1	FSK	1)		
TS 02 / TS 102 / TS 202	FSK	1)		
Contrans I V17152-xxx	LKS	1)		
Input isolator, parameterizable: Contrans I V17151-43x	LKS	1)		
Positioner: Onrac [HART or PROFIBUS-DP] with IrDA	IrDA	63866-9821051		
Conrac with usage of RS232 interface	RS232	63866-9820052		

1) Included in SMART VISION

2) For WIN NT4.0, WIN 2000 only

3) Currently for WIN NT4.0 only

Order handling: FAX +49 (0)2056/12-5095



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