- Print text, measured data, statistics and graphics
- Instrument, machine or process
- status and fault reports
  QC test and calibration tickets
- Oc test and calibration tickets
   Security and building service applications
- Security and building service application
   Data acquisition and recording
- Versions for 12 VDC, 24 VDC or 85 265 VAC power supply
- Paper re-roll option to archive printouts (IPP-AW)
- Add date & time automatically (IPP 144-40 GE)
- Print pre-stored messages and add variable data (IPP 144-40 GE)
- Connect to Siemens PLC with Windows® CE (IPP 144-40 GS)
- Ideal for use with controllers, PCs, PLCs, DPMs, counters, message displays, etc.

# **Thermal Graphics Printers**

IPP 144–40 G IPP 144–40 GE IPP 144–40 GS





# **IPP 144-40 G printer features**

- Quiet maintenance free thermal line printing mechanism, prints alphanumeric text or graphics
- "Document proof" paper has 10 year storage life
- Easy-to-use built-in configuration menu using two front keys
- Prints up to 48 alphanumeric characters per line (Standard-Mode)
- Choice of many language character sets, including IBM international
- Normal or inverse printout options
- Multi-standard opto-isolated RS 232, RS 422, RS 485 or TTY serial interface
- DIN standard housing 144 x 72 mm bezel size
- Hinged front panel for easy paper roll replacement
- Paper-out indication
- Large 16 kB input buffer for rapid data transfer
- Print interval timer adjustable from 10 sec to 24 hours

# Enhanced version IPP 144-40 GE features

As IPP 144-40 G version, plus:

- Real-time clock/calendar with easy Summer/Winter change
- Date & time can be added automatically or triggered by control character (serial interface)
- Memory to store up to 15 40-character pre-programmed texts
- Texts can be triggered by the serial interface
- Texts can be include up to 6 reserved spaces to overlay measured variables
- Automatic variable text insert and text block mode options
- Additional bi-directional interface. Also for memory programming in File or Edit modes. Option of RS 232, RS 485, Profi-Bus or USB
- Compatible with Windows® printer drivers
- **IPP 144-40 GS printer features**

Generally similar to IPP 144-40 G, but with special serial interface 1, supports XON/XOFF protocoll, to connect to Siemens PLC with Windows® CE

- Special control functions include; horizontal and vertical tabulations, form length, bold and expanded print.
- Supplied with adaptor cable for Siemens-Standard

# **IPP-AW paper re-roll Accessory**

- Mounts beneath any IPP 144-40 G printer
- Allows printout to be re-rolled for archiving
- Automatically controlled and powered by host printer (cable supplied)

# **Protective cover Accessory**

- Dust and moisture protection to IP 64 standards
- Fits over combined printer and re-roll unit facia
- Plexiglas window with soft rubber surround



• Out of paper alarm relay



#### **Technical Data** IPP 144-40 G Model IPP 144-40 GE **IPP 144-40 GS Siemens version** Standard version Enhanced version **Print mechanism** 576 dots/line (8 dots/mm) thermal line fixed head 15 lines/s (standard text mode) Printing speed 3 mm (at 48 characters/line) to 18 mm (at 8 characters/line) Character height Characters/line 48 (standard mode), 24, 16 or 8 Service life (printer) > 10.000.000 dot lines or > 50 km Print format Normal or inverse (right justified) Option: 90-degree right rotation Option: 90-degree left rotation ASCII 8-bit (IBM International), ASCII 7-bit, German, French, Danish, Norwegian, Character set Swedish, Spanish, English, Cyrillic (can be replaced by custom characters) Commercial grade thermal paper roll. PTB tested to DIN "document proof" standards. Paper Storage life up to 10 years at 0 to 60 °C and < 80% RH Width/Length/Diameter 80 mm (+0/–1 mm) 14 m typical 4,000 lines approx. / Outer 42 mm max, inner 11.5 mm min Menu program Easy-to-use built-in configuration using two front keys Serial interfaces Baud rates 110, 150, 300, 600, 1200, 2400, 4800, 9600 19200, 38400 Data format & parity 7 or 8 bit, with even, odd, mark, space or not parity 16 Kbytes Input buffer <CR> and <LF> Print trigger characters <CR>, <LF> and <FF> Addresses 31 selectable addresses Print interval timer Settable from 10 sec to 24 h \_ Serial Interface 1 Optional: RS 232 C (V24), RS 422, RS 485 or RS 232 C or TTY (Current loop): TXD TTY (20 mA current loop – active or passive) for Siemens PLC with Windows® CE Adress 00 to 31, all receiver only Handshake RTS RTS, XON/XOFF; rec./send 9-pin D-SUB socket 9-pin D-SUB socket Connections Serial Interface 2 Optional: Bi-directional RS 232 C, RS 485, Profi-BUS or USB Connections 9-pin D-SUB socket or USB socket Type B Real-time clock/calendar Accuracy 0.8 s/day Text memory CMOS-RAM with back-up battery Battery back-up Lithium cell, life 10 years approx. Memory size 600 characters Quantity of texts 15 texts each 40 characters max Via serial interface Text call / trigger Variable data overlay Up to 6 digits anywhere in text Via Interface 2 in Edit or File mode Text input Out of paper indication/alarm LED/-LED/Relay output 30 VDC, 2A; 50 VAC, 2A LED/-**Re-roll mechanism connection** 4-pin MASCON Power supply option 110/230 VAC (85...265 V), 45-65 Hz, 15 W approx. 12 VDC (10...19 V) 20 VA approx. 24 VDC (19...36 V) 18 VA approx. Connections 1.5 mm<sup>2</sup> screw terminal connections Metal housing with plastic front and rear panels Housing 144 x 72 x 159 (167 including connectors) mm Dimensions (WxHxD) **DIN** panel cut-out 138 (+1/-0) x 68 (+0.7/-0) mm, max panel thickness 12 mm Panel fixings Side mounting fixing screws Weight 1.3 kg approx. **Ambient Conditions** Protection Housing To EN 60529/VDE 0470, class IP 50 (class IP 64 with optional protection cover) Terminal To EN 60529/VDE 0470, class IP 00 Rel. Humidity < 80% till 31 °C (non condensing) Climatic –20 °C to 60 °C Storage temp. range Operating temp. range 0 °C to 45 °C

**EMC** Emission Susceptibility Safety

To EN 55011, class A; EN 55022, class B To EN 61000-4-2, EN 61000-4-3, EN 61000-4-4 To EN 61010–1:2001; CAT III >150 V ≤300 V

### **IPP-AW** paper re-roll mechanism

Operation	Motor with friction clutch. Powered and controlled automatically via host IPP 144-40 G printer		
Connections	4-pin Mascon connector. Supplied with 100 mm long 26 AWG 4-way interconnection cable		
Paper width/length	80 mm max. / 14 m approx.		
Housing	Metal housing with plastic front and rear panels		
Dimensions (WxHxD)	144 x 72 x 159 mm		
DIN panel cut-cut	138 (+1/–0) x 68 (+0.7/–0) mm, max panel thickness 12 mm		
Weight	0.4 kg approx.		
Ambient Conditions	As IPP 144-40 G printer specifications		

#### **Protective cover**

Protection	IP 64 provided IPP 144-40 G and IPP-AW are sealed against panel cut-out
External dimensions (WxHxD)	155 x 155 x 20 mm approx.
Materials	Clear Plexiglas window with soft rubber surround (Santoprene 101-80)

#### **Printer Ordering Information:**

Printer Model	Serial Interface 2	Supply Voltage Options (specify)	
IPP 144-40 G	-		
IPP 144-40 GE 232 IPP 144-40 GE 485 IPP 144-40 GE PB IPP 144-40 GE USB	RS 232 C RS 485 Profi-BUS USB Type B	110/230 VAC, 24 VDC or 12 VDC	
IPP 144-40 GS	-		

Accessory Ordering Information:				
Description	Part No.			
"Document proof" thermal paper (Pack of 10 rolls)	49234 86910			
IPP-AW paper re-roll mechanism	57200 00000			
Protective cover to fit printer and IPP-AW combination	27863 15940			

## **Product table**

Analogue panel meters Measuring transducers Digital panel instruments Electrical Equipment tester Indicator/controllers Text display/printer Bargraph displays Probes Accessories





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