B26-485 RS-485 ASCII repeater

`RS-485`

Large format meter with 6 digits and 60 mm digit height, for reading up to 25 meters for industrial applications. Repeater for ASCII protocol over RS-485 bus. Versatile and configurable instrument, with local or remote alarm control, 'watchdog' and 'bus activity' functions. Front keypad for easy access to the configuration menu and connection for remote keypad. Two universal high and low power supply options for AC and DC. Optional output and control modules for relay output, transistor output, SSR control, analog output retransmission and communications for Modbus RTU and RS-485 ASCII protocols. Sturdy metallic housing with full IP65 protection, for panel mount, wall mount or hanging mount.

Front view

Technical specifications

Reading

Digits	6
Reading	999999 / -199999
Decimal point	configurable
Led color	red or green
Digit height	60 mm
Type of digit	7 segment
Angle of vision	120º

Signal

Protocol	ASCII
Bus	RS-485
Function	repeater for ASCII code
Speed	38.400 bps to 600 bps
Data format	8n1, 8e1, 8o1, 8n2
Addresses	1 to 31
Bus terminator	not included
Watchdog	configurable from 1 to 120 seconds
Signal wire diameter	max. 0.5 mm²

Outputs and configuration

Output and control options	relays, analog output, serial communications, ...
Configuration	3 button front keypad (connection for remote keypad)

Power

Power 'H'	85 to 265 Vac and 120 to 370 Vdc (isolated 2500 Vac)
Power 'L'	11 to 36 Vdc (isolated 1500 Vdc)
Consumption	<3.5 W (meter only)
	<5.5 W (meter with options)
Power wire diameter	max. 2.5 mm²

Mechanical

Housing	metallic (textured black painted iron)
Front filter	methacrylate
IP protection	full IP65 housing
Connections	cable gland output
	internal plug-in screw terminals
Weight	<3500 grams
Mounting	panel, wall, hanging
Front size	436 x 135 mm
Panel cut-out	418 x 117 mm
Deep	80 mm (including terminals)
Operating temperature	0 to 50 ºC
Storage temperature	-20 to 70 ºC

Order reference

Format	Model	Power	Color	Option 1	Option 2	Option 3	Custom
B26	- 485	- H	- R	-	-	-	

Power
-H (85-265 Vac and 120-370 Vdc)
-L (11-36 Vdc)

Color
-R (red led)
-G (green led)

Option
- R1 (1 relay output)
- AO (analog output)
- RTU (Modbus RTU)
- S4 (RS-485)
- S2 (RS-232)
- T1 (1 transistor output)
- SSR (1 SSR control output)
- 0 (empty)

Rear view

45 YEARS 1969-2014

Q ISO 9001 Certified Quality

**CE EN-61010-1** Security

CE EN-61326-1 Electromagnetic C.

5 YEARS Extended Warranty

Output and control options

Format	Model	Power	Color	Option 1	Option 2	Option 3	Custom
B26	485	H	R				

	Function	Installable options	Isolation
R1	1 relay output	2	yes
T1	1 transistor output	2	yes
SSR	1 control for SSR relay	2	yes
AO	1 analog output	2	yes
RTU	1 Modbus RTU port	2	yes
S4	1 RS-485 port	2	yes
S2	1 RS-232 port	2	yes

Mounting options

hanging

wall

panel

side fixations (included)
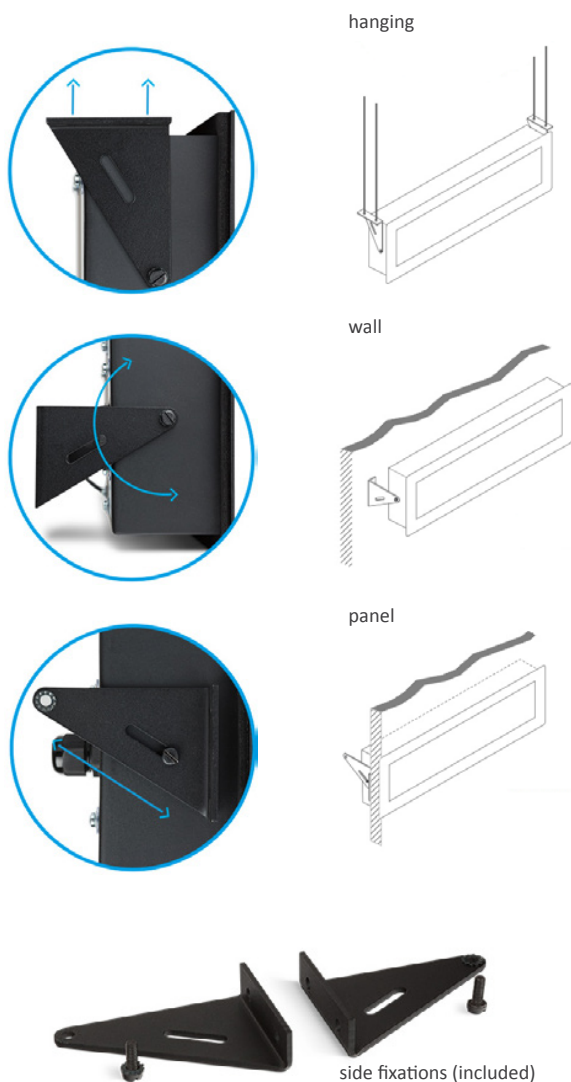
Functions included

Remote or local alarms . . . . . 'Full slave' mode allows for remote control of the alarms by writing to registers or coils. 'Process slave' mode allows for local control of alarms, based on local alarm configuration and actual display value.

'Text' mode . . . . in 'Text' mode, ASCII characters received are not translated to number, but are directly displayed as 7 segment characters. Alphanumerical characters are allowed and will be translated to 7 segment. Alarms are controlled remotely.

'Watchdog' function . . . . generates error after predefined time without communication with the master. Alarm can be linked to the watchdog function.

'Bus activity' . . . . function detects electrical activity on the bus. Useful for troubleshooting.

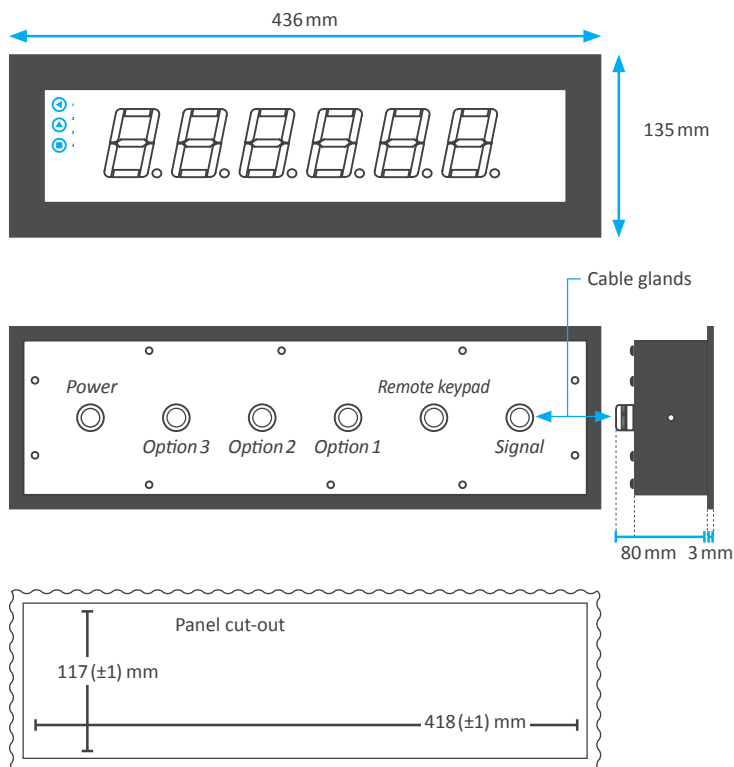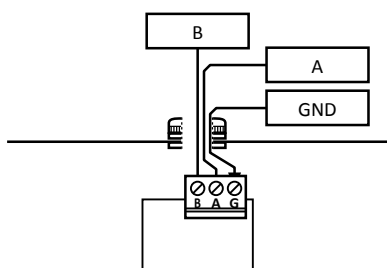**'Fast access' menu** . . . . a single press on the front keypad gives access to the instrument address or alarm setpoint.

'On power-up' function . . . . . protects systems at cold start-up.

Brightness . . . . 5 levels of brightness intensity.

Password . . . . blocks access to configuration menu.

Dimensions

436 mm

135 mm

Cable glands

Power

Remote keypad

Option 3   Option 2   Option 1   Signal

80 mm   3 mm

Panel cut-out

117 (±1) mm

418 (±1) mm

Connections

Internal structure for a B26 instrument

Power

Remote keypad

Signal

Option 3

Option 2

Option 1
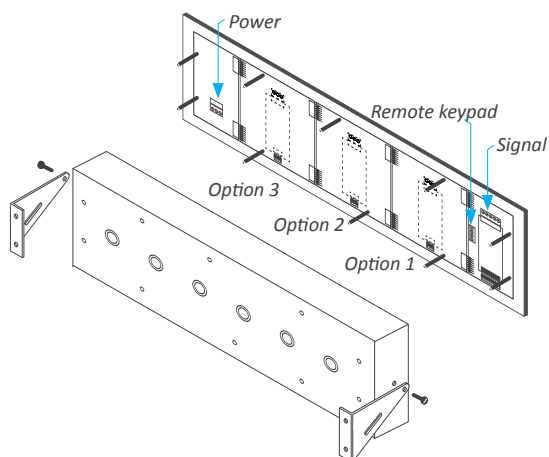
Power connections

PE

N L

fuse

PE
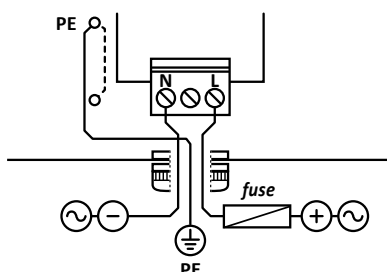
Signal connections

B

A

GND

B A G

Connections for remote keypad

GND

SQ (■)

UP (▲)

LE (◀)
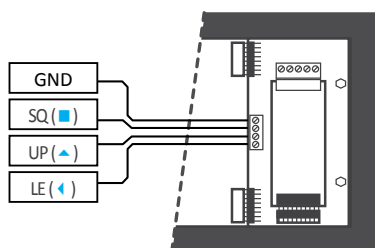
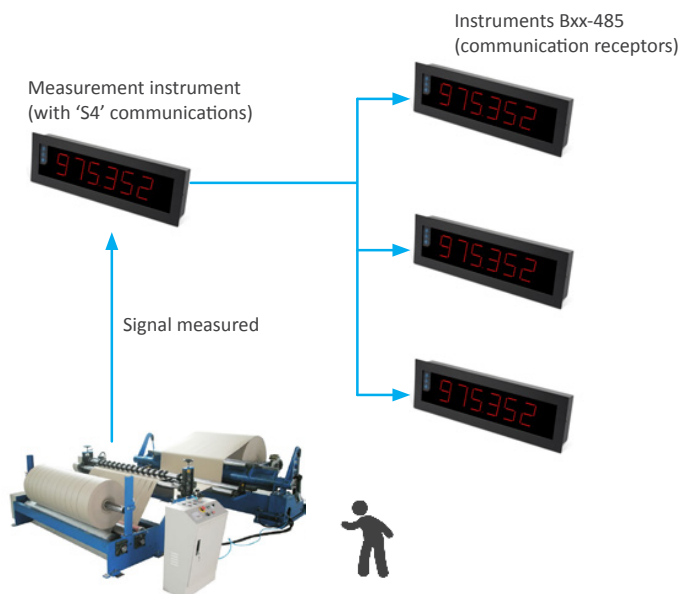## Example of application with control

A manufacturing line is controlled from a centralized PLC or SCADA. The PLC receives and manages all the information related to process control. Some information is critical to the local operators, and it is communicated through the ASCII protocol repeaters. Critical information depends on each application, for example, production rates, total stop times, trouble codes, etc.

RS-485 ASCII

Relay 1

Relay 2
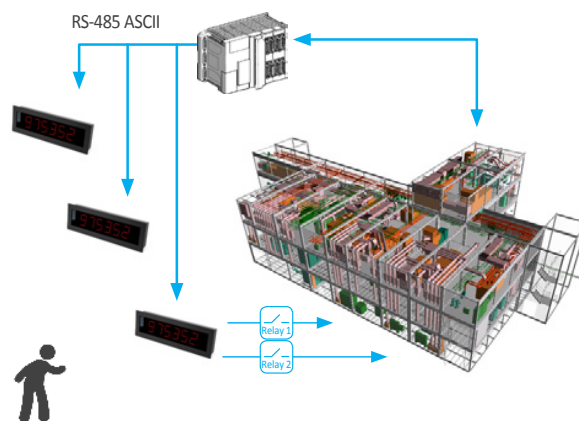
One measure, multiple information points

The large format meters from Series B can measure a wide variety of signals, and can integrate multiple output and control options. Option 'S4' for communications can be configured to transmit the measure directly to remote information points.

Instruments Bxx-485
(communication receptors)

Measurement instrument
(with 'S4' communications)

Signal measured

45 YEARS 1969-2014

Q ISO 9001 Certified Quality

CE EN-61010-1 Security

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5 YEARS Extended Warranty

Other options

Red color

JPG

Red leds

Green color

JPG

Green leds

White color

JPG

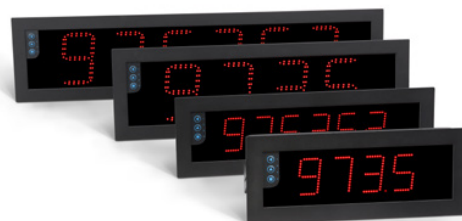*White leds*

Cable output

JPG

Preinstalled cable, 2 meters

Others formats within the Series B

	Digit height	Digits	Reading distance
Format B24	60 mm	4	up to 25 meters
Format B26	60 mm	6	up to 25 meters
Format B44	100 mm	4	up to 50 meters
Format B46	100 mm	6	up to 50 meters

Accessories

RKB

Remote keypad

IPB24

JPG

IP65 protection for the B24 panel junction

IPB26

JPG

IP65 protection for the B26 panel junction

IPB44

JPG

IP65 protection for the B44 panel junction

IPB46

JPG

IP65 protection for the B46 panel junction

Other RS-485 ASCII repeaters

Series M

4, 5 and 6 digits
digit height . . . . . . 14 mm
color . . . . red, green
vision . . . . 5 meters
size . . . . 96 x 48 mm

Series K

Further view
digit height . . . . . . 20 mm
color . . . . red
vision . . . . 8 meters
size . . . . 96 x 48 mm

Series S

Compact size
digit height . . . . . . 14 mm
color . . . . red, green
vision . . . . 5 meters
size . . . . 72 x 36 mm