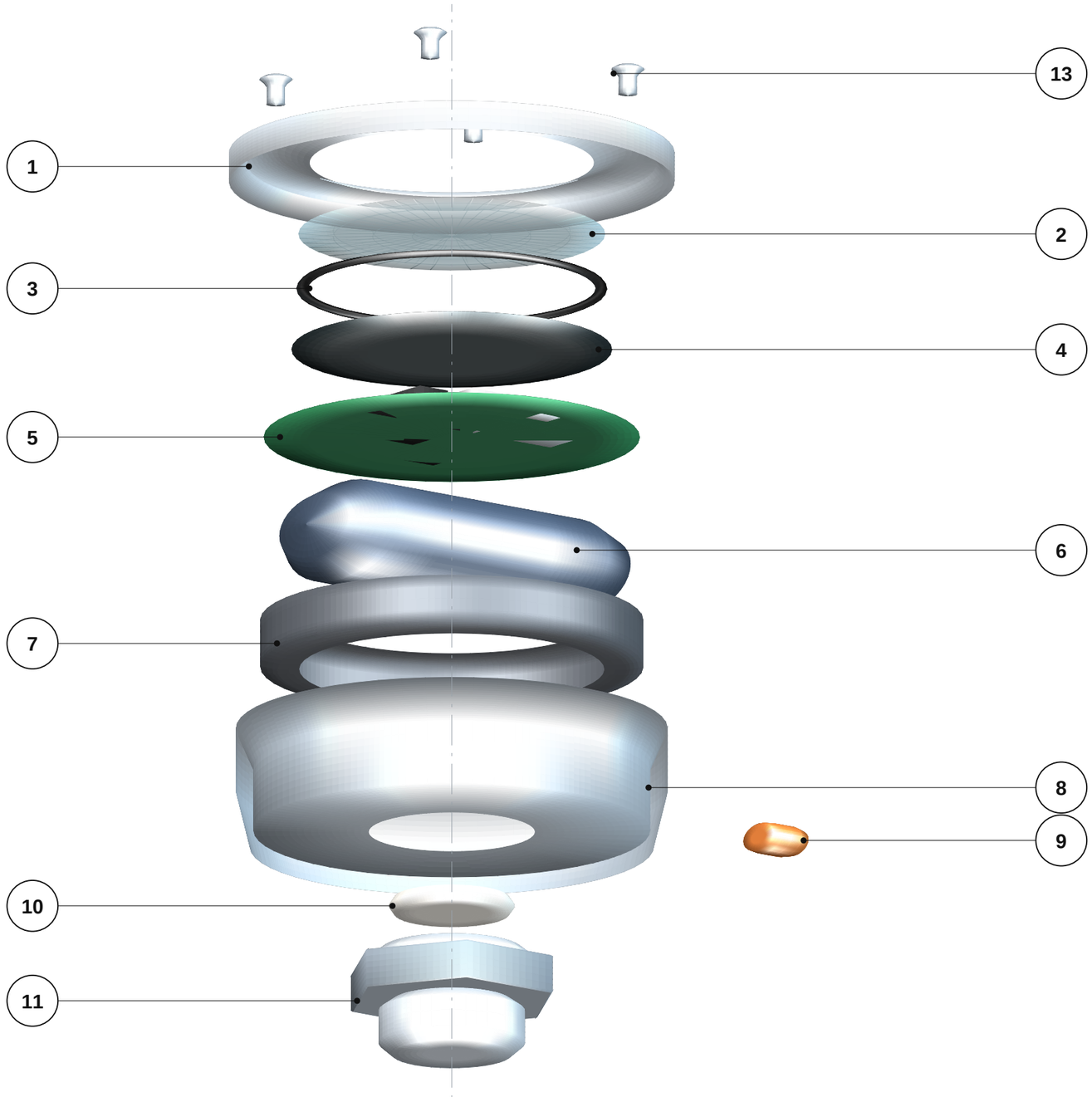


Exploded view, parallel projection, not to scale. Items 12 and 14 not shown.

Item	Qty	Part number	Description	Material	Remark
1	1	PG200-1101	Bezel ring, knurled	1.4404	
2	1	PG200-1102	Cover glass Ø44 × 1.5	Sapphire	AR both sides
3	1	OR-42X1.5-FKM	O-ring 42 × 1.5	FKM 75	
4	1	PG200-2401	Display module 1.9 in	–	transflective
5	1	PG200-2000	Main board assembly	FR-4	see sheet 3
6	1	BAT-C-LTC	Lithium cell 3.6 V 8.5 Ah	Li-$SOCl_2$	C size
7	1	PG200-1301	Battery holder	PPS GF40	
8	1	PG200-1201	Housing	1.4404	machined, Ra 0.8
9	1	PG200-1501	Push button with seal	1.4404 / EPDM	
10	1	CS-18-AL	Ceramic sensor cell Ø18	Al_2O_3 96 %	14 ranges
11	1	PG200-1401-G4	Sensor carrier G½, SW 27	1.4404	laser-welded
12	1	VENT-M5	Pressure compensation element	PA / ePTFE	not shown
13	4	ISO 14580 M2.5×6	Screw, hexalobular	A4-70	0.5 Nm
14	1	PG200-1601	Nameplate	1.4301	laser-marked

Assembly notes

1 Sensor cell (10) bonded and laser-welded into carrier (11) before final assembly; helium leak rate < $1 \cdot 10^{-8}$ mbar·l/s.
2 Carrier (11) torque into housing (8): 25 Nm, thread sealant not permitted (hygienic version).
3 Lightly grease O-ring (3) with silicone-free lubricant; glass (2) seated without tools.
4 Screws (13): 0.5 Nm, cross pattern. Bezel (1) pressed on, then calibration at 11 points × 5 temperatures.
5 Protection class IP68 verified on 100 % of units, 2 m water, 30 min.

Mass 212 g (G½ version, without gasket) · Protection IP68 · Wetted parts 1.4404, Al_2O_3, FKM

Range code	Measuring range	Overload	Burst	Sensor cell
R01	−1 … 0 bar	4 bar	10 bar	CS-18-AL-L
R06	0 … 10 bar	30 bar	80 bar	CS-18-AL-L
R08	0 … 40 bar	120 bar	200 bar	CS-18-AL-M
R10	0 … 100 bar	300 bar	500 bar	CS-18-AL-M
R12	0 … 400 bar	1000 bar	1500 bar	CS-18-AL-H
R14	0 … 1000 bar	1500 bar	2500 bar	CS-18-AL-H

Six of the fourteen ranges shown; full list in data sheet PG200-DS-EN.

Rev.	Description	Date	By
A	First release for prototypes (20 pcs)	2026-03-02	SMo
B	Bezel knurl 0.8 mm, O-ring 42 × 1.5 FKM, vent added	2026-05-18	SMo
C	Series release; battery holder PPS GF40; screws A4	2026-07-28	PRo

VALTORNE

Valtorne Instruments SA
Vufflens-la-Ville

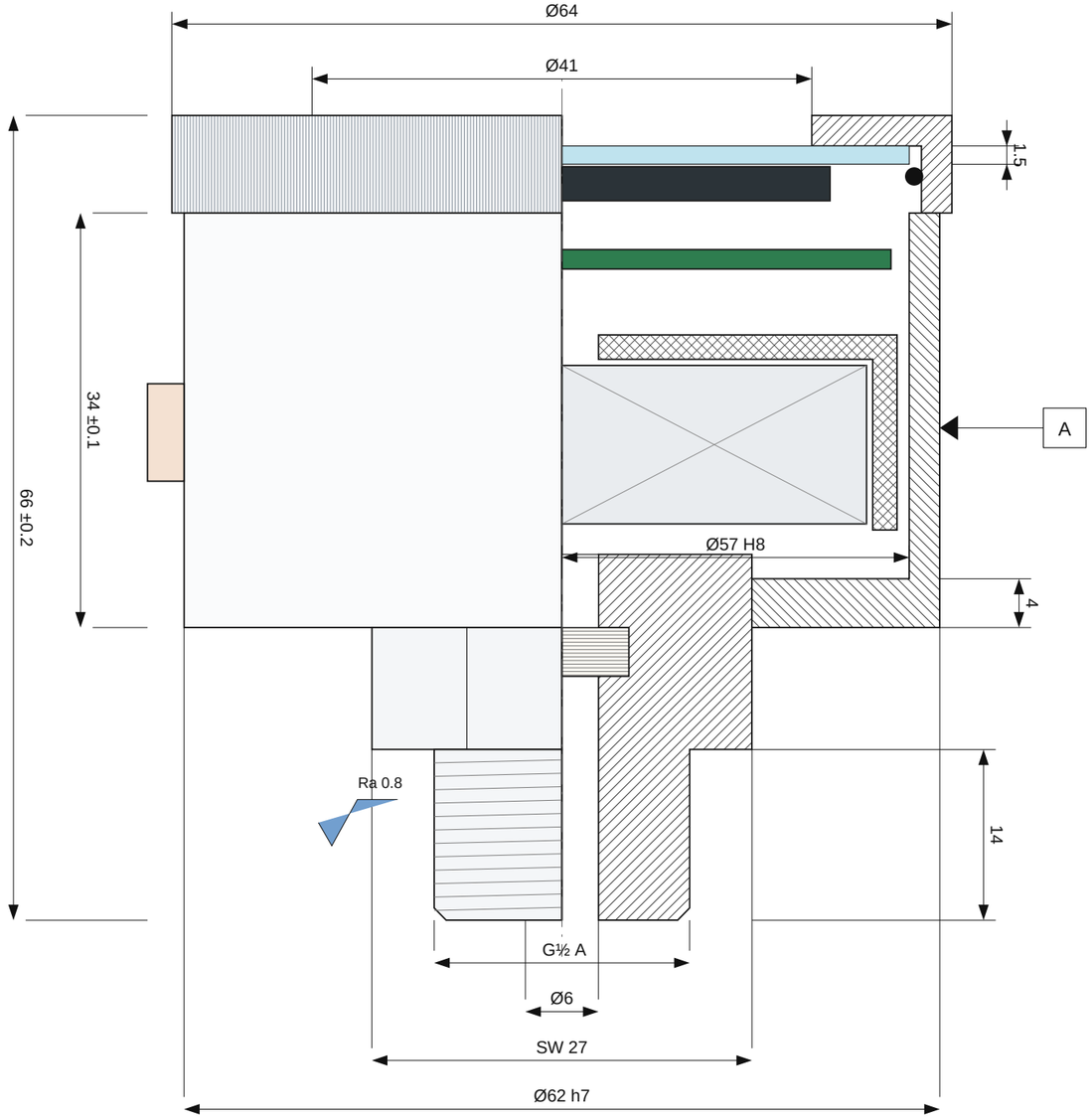
Title
Main board block layout and wiring

Product
PG-200 digital pressure gauge, compact G½ version (PG200-Rxx-G4)

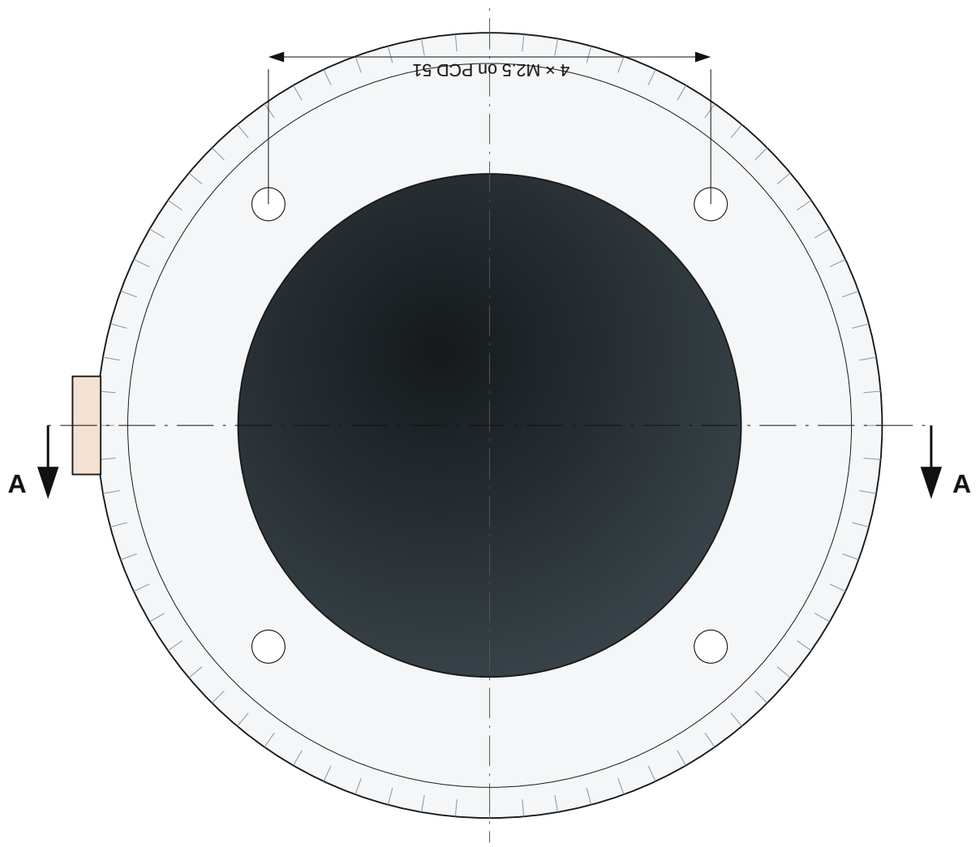
Drawing no.	Revision	Sheet	Scale
PG200-1000-01	C	1 / 3	NTS

Drawn	Checked	Approved	General tolerances
S. Mottier 2026-07-14	P. Rochat 2026-07-21	N. Perrottet 2026-07-28	ISO 2768-mK

Front view, half section A–A



Top view



Notes

1 Dimensions in mm. Scale 2:1. Untoleranced dimensions ISO 2768-mK. Drawing in first-angle projection.
2 Wetted parts 1.4404 (316L), electropolished Ra ≤ 0.8 µm; edges broken 0.2.
3 Thread G½ A to ISO 228-1; sealing on the front face of the hex with the supplied gasket.
4 Section hatching per material, see key below the view.

⌖ | Ø0.05 | A — position of the G½ axis relative to datum A (housing Ø62 h7)

▱ | 0.02 — flatness of the sealing face

1.4404 stainless steel · PPS GF40 plastic · Al_2O_3 ceramic · FKM O-ring (solid)

Rev.	Description	Date	By
A	First release for prototypes (20 pcs)	2026-03-02	SMo
B	Bezel knurl 0.8 mm, O-ring 42 × 1.5 FKM, vent added	2026-05-18	SMo
C	Series release; battery holder PPS GF40; screws A4	2026-07-28	PRo

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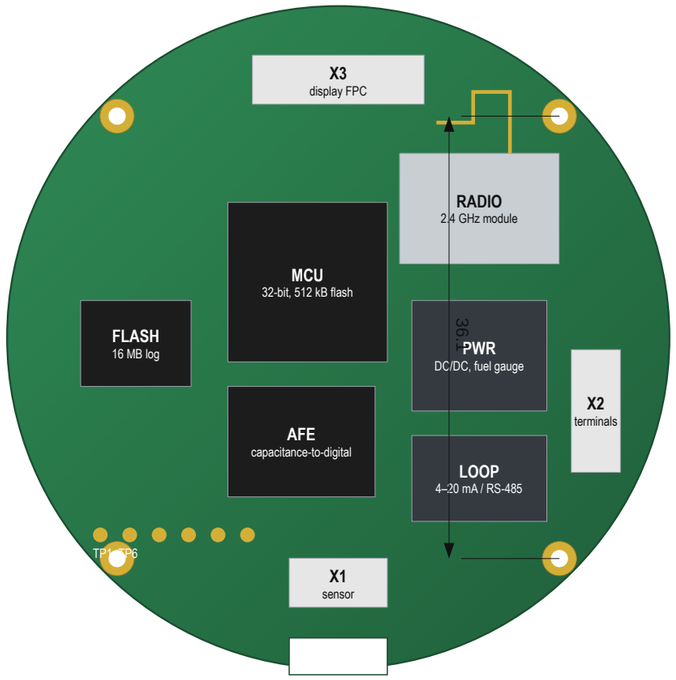
Title: **Main board block layout and wiring**

Product: PG-200 digital pressure gauge, compact G½ version (PG200-Rxx-G4)

Drawing no.	Revision	Sheet	Scale
PG200-1000-02	C	2 / 3	2:1

Drawn	Checked	Approved	General tolerances
S. Mottier 2026-07-14	P. Rochat 2026-07-21	N. Perrottet 2026-07-28	ISO 2768-mK

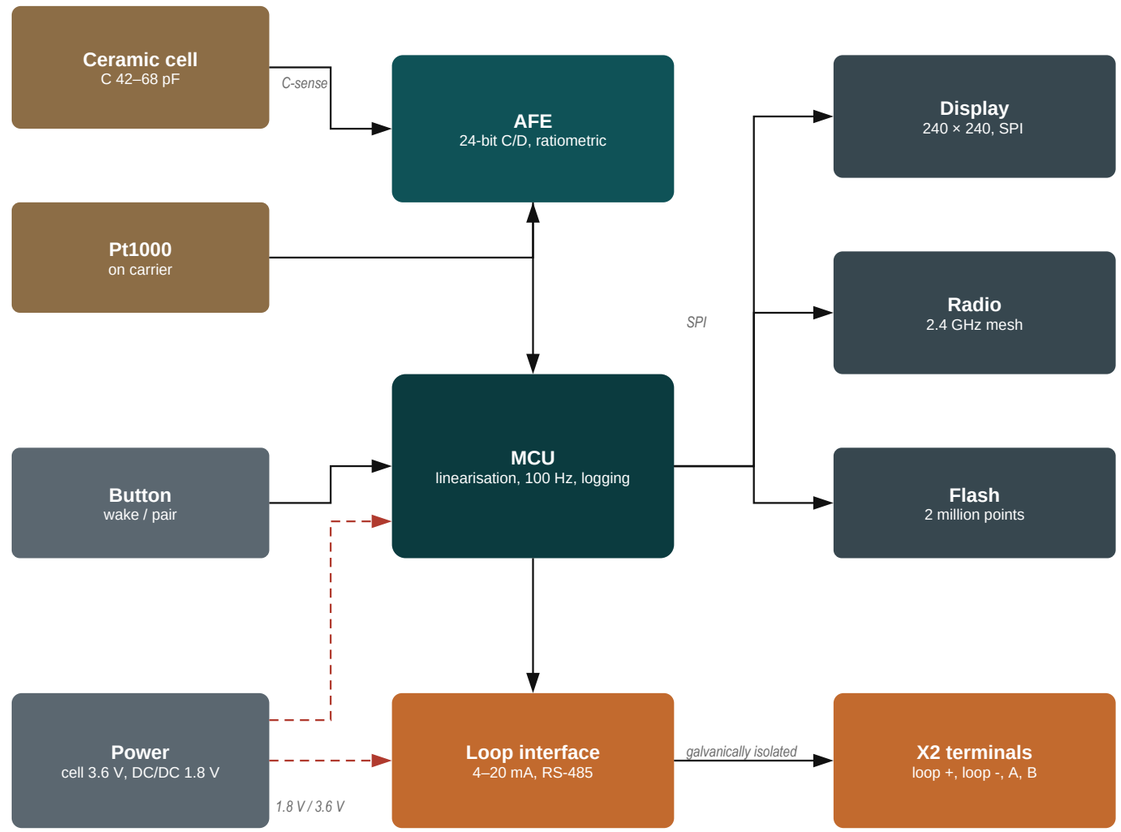
Main board PG200-2000, component side (2:1)



X1 pin	Signal	Wire
1	C-sense excitation	white
2	C-sense measure	brown
3	C-reference	green
4	Pt1000 +	yellow
5	Pt1000 −	grey
6	Shield	drain

X2 terminal	Signal	Rating
1	Loop + / supply	10–30 V DC
2	Loop −	4–20 mA
3	RS-485 A	Modbus RTU
4	RS-485 B	19.2 kbit/s
5	Earth	housing

Functional block diagram



Board data

4 layers FR-4, 1.0 mm, ENIG
Sleep current 6 µA, average 140 µA at 1 reading/s
Conformal coating, IPC-CC-830
ESD ±8 kV contact on X2

Rev.	Description	Date	By
A	First release for prototypes (20 pcs)	2026-03-02	SMo
B	Bezel knurl 0.8 mm, O-ring 42 × 1.5 FKM, vent added	2026-05-18	SMo
C	Series release; battery holder PPS GF40; screws A4	2026-07-28	PRo

VALTORNE

Valtorne Instruments SA
Vufflens-la-Ville

Title: **Main board block layout and wiring**

Product: PG-200 digital pressure gauge, compact G½ version (PG200-Rxx-G4)

Drawing no.	Revision	Sheet	Scale
PG200-1000-03	C	3 / 3	2:1

Drawn	Checked	Approved	General tolerances
S. Mottier 2026-07-14	P. Rochat 2026-07-21	N. Perrottet 2026-07-28	ISO 2768-mK