ASA-RT s.r.l.

Standard   **/P, /C, /D, /PN**

120   23   35

101   101

Sel   Sel
Prg   Prg
+   +
−   −
0/↵   0/↵

Dimensions in mm

ADS-R is a digital measuring amplifier for strain gauges bridge, including a 24 bit acquisition circuit with programmable gain and 3 analog outputs towards a supervision unit.

In the **standard mode**, the measuring amplifier allows the analog signal zeroing (calibration), and the output gain increasing / decreasing, by a three-buttons interface; the output tension is continuously visualised on the display, allowing, therefore, the adjustment without external instruments (tester or screw-driver).
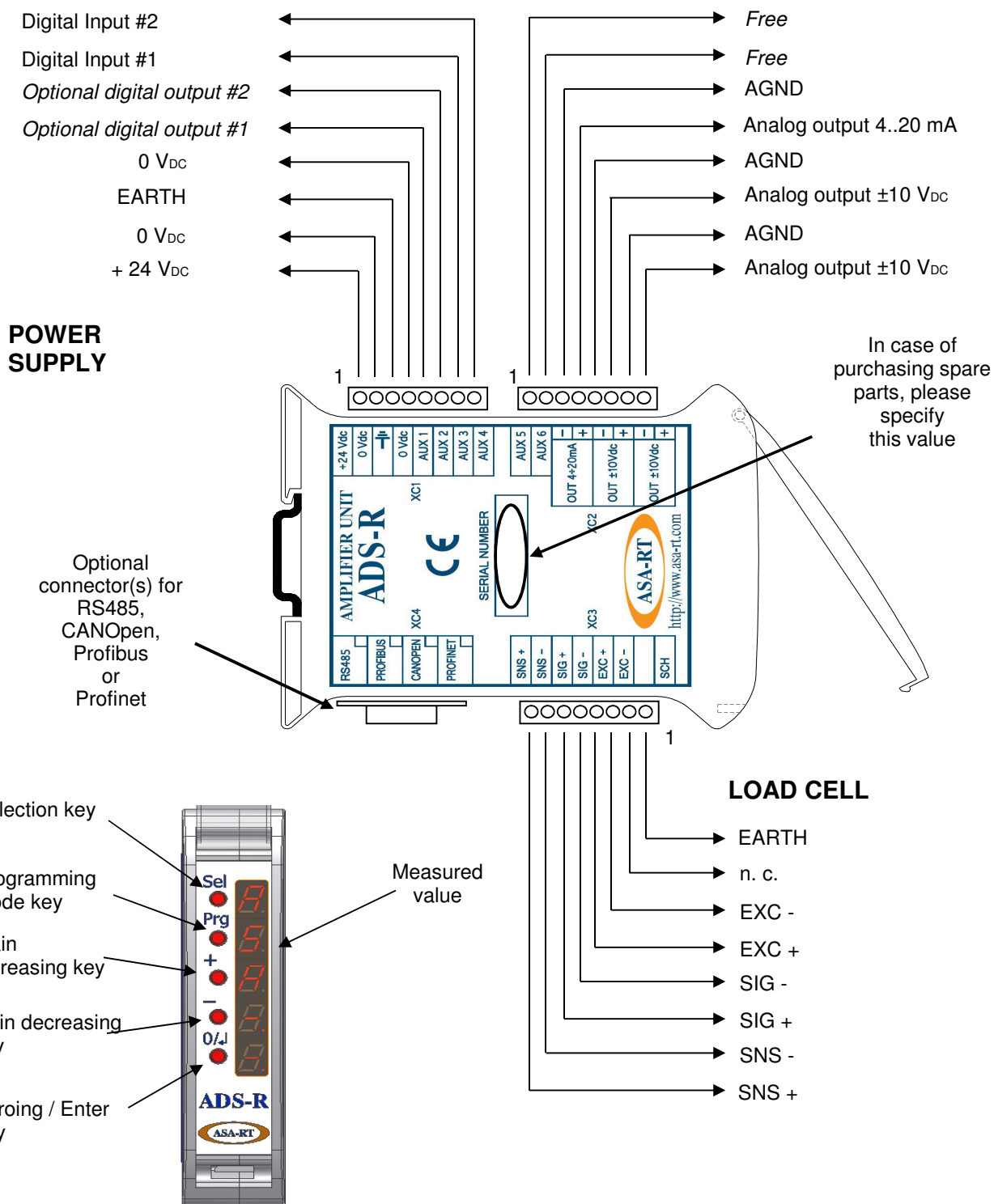
In the **advanced mode** (selectable by a special combination of keys), it is possible to program all operational parameters of the units, by the keyboard and the display: zero, gain (full scale in engineering unit), pass-band of the filter on the signal etc.; in normal operation, the display visualises the tension measurement, calculated according to the current parameters.

The ADS-R is also available with an RS485 interface, a CANopen DS404 interface, a Profibus DPv1 interface or a Profinet I/O interface

TECHNICAL CHARACTERISTICS

- External power supply 24VDC ± 10% / 0.2A
- Interface for strain gauges bridge, characterised by:
     bridge supply 5 VDC - 60 mA total (4 load cells 350 Ohm in parallel).
     acquisition with a 24 bit ADC converter.
     linearity 0,05% F.S.
     thermal drift 0,001% F.S. / °C
     independent sense wires.
- N. 2 analog outputs ± 10 VDC, Ro $\geq$ 2 KOhm.
- N. 1 analog output 4..20 mA , Ro $\leq$ 150 Ohm.
- N. 2 opto-isolated digital inputs 24 VDC (positive logic).
- *N. 2 opto-isolated optional digital outputs 24 VDC / 50 mA (positive logic).*
- 5-digits display indicating the measured value (from +9999 to -9999).
- Key for zeroing the measured value / enter for the value in edit.
- Key for gain increasing / increasing digit for the value in edit.
- Key for gain decreasing / decreasing digit for the value in edit.
- Key for entering parametrization / abort for the value in edit.
- Key for selecting the digit in edit.

- Assembling on DIN guide step 23 mm (standard solution) or 35 mm (with expansion card).
- RS 485 optional expansion card.
- Profibus DPv1 optional expansion card.
- CANopen DS404 optional expansion card.
- Profinet I/O optional expansion card with integrated 2-ports switch.

ELECTRICAL CONNECTION

Digital Input #2 →   *Free*

Digital Input #1 →   *Free*

Optional digital output #2 →   AGND

Optional digital output #1 →   Analog output 4..20 mA

0 V$_{DC}$ →   AGND

EARTH →   Analog output ±10 V$_{DC}$

0 V$_{DC}$ →   AGND

+ 24 V$_{DC}$ →   Analog output ±10 V$_{DC}$

POWER SUPPLY

In case of purchasing spare parts, please specify this value

Optional connector(s) for RS485, CANOpen, Profibus or Profinet

AMPLIFIER UNIT ADS-R — SERIAL NUMBER — ASA-RT — http://www.asa-rt.com

XC1: +24 Vdc | 0 Vdc | ⏚ | 0 Vdc | AUX 1 | AUX 2 | AUX 3 | AUX 4
XC2: AUX 5 | AUX 6 | OUT 4÷20mA (– +) | OUT ±10Vdc (– +) | OUT ±10Vdc (– +)
XC4: RS485 | PROFIBUS | CANOPEN | PROFINET
XC3: SNS + | SNS – | SIG + | SIG – | EXC + | EXC – | SCH

Selection key — Sel

Programming mode key — Prg

Gain increasing key — +

Gain decreasing key — −

Zeroing / Enter key — 0/↵

Measured value

ADS-R

ASA-RT

LOAD CELL

→ EARTH

→ n. c.

→ EXC -

→ EXC +

→ SIG -

→ SIG +

→ SNS -

→ SNS +

ORDER CODE

ADS-R ☐ ☐

Family identifier

: Standard solution
/ O2 : with 2 optional digital output

: Standard solution
/ D: with RS485 interface
/ P: with ProfiBus interface (DPv1)
/ C: with CANopen interface (DS404)
/ PN : with Profinet I/O interface

Technical modification to reserve