

ATS-1 Automated Truck Scale System



Approvals



Standard Features

- Operator prompting
- Formattable tickets that print at the end of a transaction
- Traffic light control
- Transmits weight to remote display (only when activated)
- 115 VAC
- Currency acceptor (US currency only)

Specifications

LINE VOLTAGES:

115 or 230 VAC, high pot test

FREQUENCY:

50 or 60 Hz

POWER CONSUMPTION:

340 mA, maximum @ 115 VAC (26 W)
240 mA @ 230 VAC (26 W)

FUSING:

115 VAC: 2 x 400 mA TR5 subminiature fuses Wickman Time-Lag 19374 Series. UL Listed, CSA certified and approved
230 VAC/North American: 2 x 315 mA TR5 subminiature fuses Wickman Time-Lag 19372 Series. UL Listed, Semco and VD Approved

FULL SCALE INPUT SIGNAL:

Up to 70 mV

EXCITATION VOLTAGE:

10 ± 0.5 VDC, 16 x 350Ω or 32 x 700Ω load cells per A/D card

SENSE AMPLIFIER:

Differential amplifier with 4 and 6 wire sensing

ANALOG SIGNAL INPUT RANGE:

-10 mV to +70 mV

ANALOG SIGNAL SENSITIVITY:

0.3 μV/graduation minimum @ 7.5 Hz
1.0 μV/graduation typical @ 120 Hz
4.0 μV/graduation typical @ 960 Hz

A/D SAMPLE RATE:

7.5 to 960 Hz, software selectable

INPUT IMPEDANCE:

>35M typical

INTERNAL RESOLUTION:

8,000,000 counts/8,000,000 23 bit

WEIGHT DISPLAY RESOLUTION:

9,999,999

INPUT SENSITIVITY:

10 nV per internal count

SYSTEM LINEARITY:

±0.01% full scale

ZERO STABILITY:

±150 nV/°C, maximum

SPAN STABILITY:

±3.5ppm/°C, maximum

CALIBRATION METHOD:

Software, contents stored in flash memory

INPUT VOLTAGE DIFFERENTIAL:

±800mV referenced to earth ground

INPUT OVERLOAD:

Load cell signal lines ±10V continuous, ESD protected

RFI/EMI PROTECTION:

Signal, excitation and sense lines protected

ANALOG OUTPUT:

Option card: 16 bit resolution DAC
Load resistance: 1.1KΩ minimum
Voltage output: 0 – 10 VDC
Current output: 0 – 20 mA
External loop resistance: 840Ω maximum

MICROCOMPUTER:

Motorola ColdFire® MCF5307 main processor @ 90 MHz

DIGITAL I/O:

Four I/O channels on CPU board; optional 24-channel I/O expansion boards available

DIGITAL FILTER:

Software selectable: 1–256, enhanced RATTLETRAP® hybrid digital filtering

SERIAL PORTS:

Four ports on CPU board support up to 115,200 bps; optional dual-channel serial expansion boards available

Port 1: Full duplex RS-232

Port 2: RS-232 with CTS/RTS; PS/2 keyboard interface via DB-9 connector

Port 3: Full duplex RS-232, 20 mA output

Port 4: Full duplex RS-232, 2-wire RS-485, 20 mA output

DISPLAY:

4.6" W x 3.4" H (116 W x 86 mm H), 320 x 240 pixel VGA Liquid Crystal Display (LCD) module with adjustable contrast, 75 Hz scan rate 26,000 cd/m2 brightness

KEYBOARD:

27-key membrane panel, PS/2 port for external keyboard connection

OPERATING TEMPERATURE:

Legal: 14°F to 104°F (-10°C to +40°C)
Industrial: 14°F to 122°F (-10°C to +50°C)

STORAGE TEMPERATURE:

14°F to 158°F (-10°C to +70°C)

HUMIDITY:

0-95% relative humidity

DIMENSIONS*:

Indicator: 11.6" W x 9.1" H x 5.0" D (294 W x 231 H x 127 mm D)
Indicator Box: 16.0" W x 20.0" H x 8.0" D (406 W x 508 H x 203 mm D)
Printer Box: 18.5" W x 20.0" H x 12.0" D (470 W x 508 H x 305 mm D)

RATING/MATERIAL:

NEMA 4X/IP66, stainless steel

APPROVALS:

NTEP-certified per H-44 at 10,000 Divisions, Class III/III.L, CC# 01-088; Measurement Canada pending; CE marked; TUV; UL & C-UL listed

WARRANTY:

2-year limited warranty

* Please consult factory for drawings

ColdFire is a registered trademark of Motorola, Inc.