



### Description

The **AR-ADSP** type railcar scale is the perfect solution to weigh-in-motion trains with coupled wagons and locos running on the mainline and to determine the track load and freightage. One or more locos are allowed anywhere in the train.

The sensor area of the scale built under the unbroken rail is one or two short fields consisting of **AR-UG** type weighing sleepers. The ready-to-mount sleepers are shipped with load cells complying with the **OIML R60** standard; the installation requires only normal rail construction methods without breaking the rail. The track section affected by the scale must be straight and horizontal.

The high speed weighing in motion is essential as it weighs trains passing by the scale at mainline speed automatically without disturbing the traffic and provides the weighing results automatically. The weighing results are identifiable and traceable according to the ISO 9000 quality management systems.

The scale is shipped with **AR-D4309** type weighing indicator that provides a direct network interface to the **AR-UNIDIS** process visualization and the **AR-UNIDAT** weighing management softwares, to the **ARDIN** integrated systems, to transfer the stored weighing data and the log files and to the OpenVPN-based remote access service (RAS).

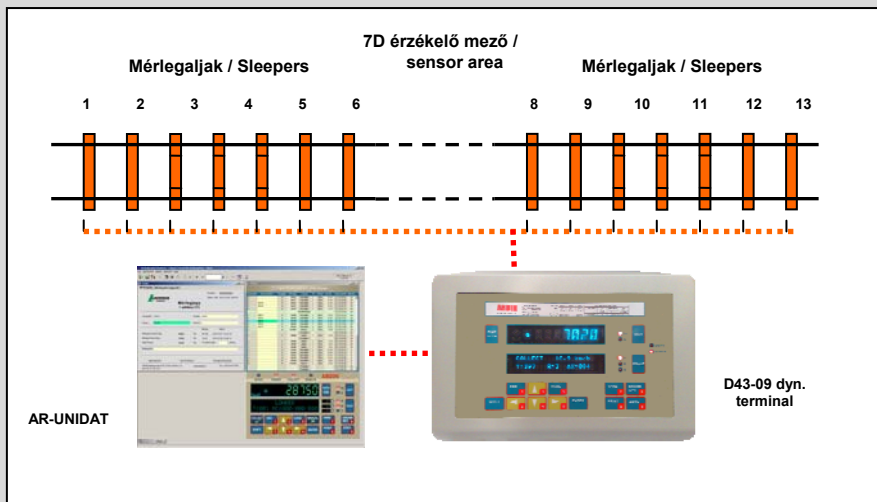
### Principle of Operation:

The **AR-ADSP** type scale records the signals coming from the load cells built into the sleepers, and evaluates the digital data; provides axle and wheel load, the weight of the wagons and the train, the moving direction and speed, recognizes the wagon type and qualifies the weighing.

### Advantages:

- Weighing and monitoring all passing traffic
- Weighing speed in mainline range 0-160 km/h
- Weighing accuracy according to OIML R106
- Easy-to-relocate scale structure
- Overload warning for wagon verification
- All data for freightage
- Local and remote operation

### Dimensions:



Dimensions in [mm] units.

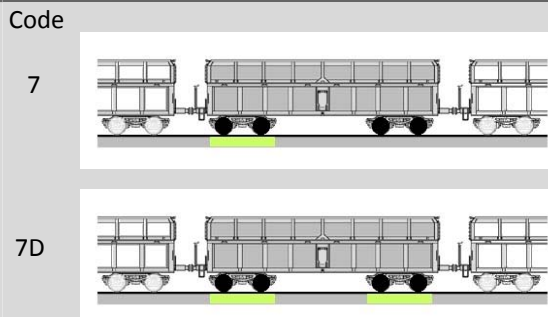
### Technical Specification:

Weighing capacity	30 tons per axle, 120 tons per wagon
Division	100 kg
Accuracy	According to OIML R106
	± 2% or better under 40 km/h
	± 4% or better under 160 km/h
Speed range	0-160 km/h, max. ± 10 % speed variation
Weighing mode	both directions, pushed or pulled trains
Produced results	axle and wheel load, mass of wagon and train total weight, velocity, wagon type, statistics
Wagon type recognition	automatic
Rail	unbroken, mainline rail
Clips	SKL 12, or Pandrol e clips
Power supply	230V, +10% -15%, 50 Hz, about 300 VA
Operating temperature	- 5 °C / + 30 °C operational for indicator - 25 °C / + 50 °C operational for scale

### Available layouts:

Axle code	Length [m]	Bridge /Module [pcs]
7	4	1
7D	4(4)4	2

### Weighing layout:



Subject to change without notice.