

# INTRINSICALLY SAFE

EK-AEP SERIES

Compact Balances



**AND**  
A&D Weighing

# Intrinsically Safe Compact Balances Connectivity for Hazardous Environments

The EK-AEP series of balances are intrinsically safe, lightweight, compact and economical.

In potentially explosive and hazardous environments, the EK-AEP series is equipped with an optical connector from which it can output weighing results to a device in a distant safe area via optical fiber cable and an optical communication adapter.

\*1 Limits the energy available to a level insufficient to cause sparks or heat that can ignite flammable gases or vapors.  
\*2 Both sold separately



## EK-AEP: Areas Certified for Safe Use

	Flammable gases/vapors present continuously	Flammable gases/vapors present intermittently	Flammable gases/vapors present only accidentally
IECEX ATEX FM/FMc (NEC505)	Zone 0	Zone 1	Zone 2
FM/FMc (NEC500)	Division 1		Division 2

The balance can be used in locations where ignitable concentrations of flammable gases, vapors or liquids are present for long periods. (i.e. Zone 0 or Division 1).



IECEX: Ex ia op is IIB T3 Ga  
ATEX: II 1G Ex ia op is IIB T3 Ga  
FM/FMc (NEC505): Class I, Zone 0, AEx/Ex ia op is IIB T3  
FM/FMc (NEC500): IS / I / 1 / C,D / T3C  
Tamb -25 to +40°C



UP TO 250 HOURS OF  
BATTERY OPERATION

Avoid expense of special wiring for securing power from an area with a safety barrier.

ONLY FOR USE WITH:

Duracell AA Alkaline MN1500 LR6

Energizer AA E91 Alkaline LR6 AM3

Panasonic AA Alkaline LR6 (XJ) 1.5V batteries.

# Safe and Connected Weighing Solution



## FEATURES:

- Hygienic and chemically resistant stainless steel (SUS304) weighing pans
- Easy-to-read backlit LCD display
- Multiple weighing units: g, oz, lb, ozt, ct, mom, dwt, gr, N, in addition to pcs (counting mode), % (percent mode) and SG (specific gravity)
- GMP/GLP compliant output to meet documentation requirements
- Auto power OFF function to save battery- power)
- Comparator function for fast and accurate filling, packing, sorting, etc
- Adjustable response characteristics to offset drafts and vibrations
- Security ring for wire-locking the balance to prevent theft

## AD-1611



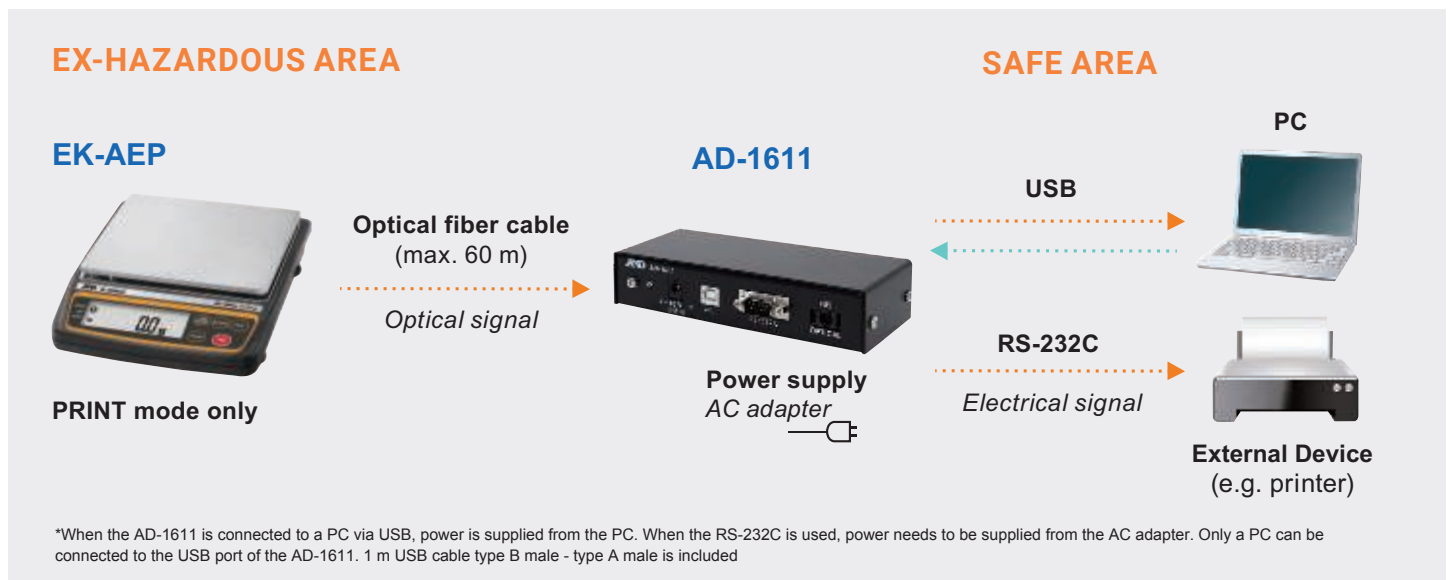
AD-1611 optical communication adapter for data output (sold separately). The AD-1611 connect the EK-AEP to an external device such as a printer or PC through RS-232C or USB.

## Accessory



Optical fiber cable to connect EK-AEP and AD-1611 available in 10 m, 30 m, and 60 m.

## Setup Image:



# Specifications

EK-AEP Series		EK-300AEP	EK-3000AEP	EK-12KAEP
Weighing capacity		300 g	3000 g	12 kg
Minimum weighing value		0.01 g	0.1 g	1 g
Repeatability (Standard Deviation)		0.01 g	0.1 g	1 g
Linearity		±0.02 g	±0.2 g	±1 g
Sensitivity drift		±20 ppm/°C (10 to 30°C/50 to 86°F)		
Counting mode	Min. unit mass* <sup>i</sup>	0.01 g	0.1 g	1 g
	No. of samples	5, 10, 25, 50 or 100 pieces		
Percent mode	Min. % display	0.1%		
	Min. 100% reference mass	1 g	10 g	100 g
Display		7 segment LCD (character height: 16 mm) with backlight		
Display refresh rate		Approx. 10 times/second		
Operating temperature and humidity		0 to 40°C/32 to 104°F, 85% RH or less (no condensation)		
Battery life		Approx. 250 hours (with four AA alkaline batteries* <sup>ii</sup> , backlight off)		
Weighing pan size		Ø110 mm	133 × 170 mm	
Dimensions		190 (W) × 218 (D) × 54 (H) mm	190 (W) × 218 (D) × 53 (H) mm	
Net weight		Approx. 1.2 kg	Approx. 1.5 kg	
Calibration weight* <sup>i</sup>		300 g	3000 g	10 kg


\*<sup>i</sup> Factory setting

\*<sup>ii</sup> To be used only with four DURACELL AA alkaline MN1500 LR6, ENERGIZER AA E91 alkaline LR6 AM3, or Panasonic AA alkaline LR6 (XJ) 1.5V batteries.

## AD-1611

Power supply	AC adapter or USB
Operating temperature and humidity	-10 to 40°C/32 to 104°F, 85% RH or less (no condensation)
Baud rate	According to the value set on the balance
Receiving connector	F05 (IEC 60874-17, F05 type)
Sending connector	RS-232C (D-Sub 9 pin) or USB (type B)
Optical transmission distance	Max. 60 m (no extension available)
Dimensions	160 (W) × 58 (D) × 38 (H) mm
Net weight (main unit only)	Approx. 380 g
Standard accessories	AC adapter, USB cable

## Accessories

AX-KS5456-010	Optical fiber cable (10 m)	 AX-KS5456-030
AX-KS5456-030	Optical fiber cable (30 m)	
AX-KS5456-060	Optical fiber cable (60 m)	

## Standard functions

