# AC5-45 LP™ Series

# LOW PROFILE **PLATFORM SCALES**



# The Next Generation in Aircraft Weighing

Maximizing accuracy, ease of use and portability has been long sought in aircraft weighing systems. Intercomp once again answers the call of the industry by providing the AC5-45LP Series Low Profile Platform Weighing System – the next generation in aircraft weighing.

The AC5-45LP series offers a range of models designed to meet your specific weighing requirements. Combines high precision accuracy with a lightweight low profile platform design to provide the easiest to use weighing system. Wireless communication enables the data to be transmitted to a central processing unit without the use of any cabling.

Whether you need to weigh a non fixed wing or a wide body aircraft, the AC5-45LP series of scales will enable you to complete the job quickly and accurately. The system can almost effortlessly be brought to the aircraft so weighing can be completed in the easiest and most cost effective manner. Most importantly, this family of scales combines affordability with advanced technology.









## **AC5-45 LP Series**

The Only Fully Electronic Low Profile Scales with Wireless Technology.





#### **Platform Design**

The Intercomp platform system is fully electronic - no outdated hydraulics or moving parts. All load cells are certified for repeatability and performance to provide a full range accuracy of +/-0.1% of applied load (accuracy traceable to U.S. National Institute of Standards and Technologies).

The AC5-45LP Series is designed with portability and ease of use in mind. Because the height is less than half that of traditional platform scales, long and heavy ramps and accessories are not required. The lightweight compact construction enables one person to carry two scales.

#### **Ease of Operation**

Simply place the scales in front of the tires and tow the aircraft onto the platform. No adjustments or manual corrections are required - the scale does all the work for you. Simply take the readings and back the aircraft off.

#### **Jumbo-sized Display**

Measurements are easy to view from a standing position due to the 1 inch / 25 mm high LCD screen. An automatic back light illuminates the display to improve readings in low light conditions. No more getting on your hands and knees with a flashlight to read a small display. Indications include lb/kg mode, low battery, calibration lock, and auto zero. Additionally, error messages reduce troubleshooting during service incidence. All push buttons are stainless steel and recessed while the entire panel is protected by a lexan shield to prevent damage even if an aircraft tire rolls over the indicator.

#### **Automatic Weight Corrections**

A variety of corrections ensure the weight displayed is the weight applied - no need for manual adjustments. Because the effects of gravity can alter weights at different locations, the AC5-45LP Series includes automatic altitude and latitude correction. Unlike hydraulic scales, the AC5-45LP doesn't require lengthy warm up time or multiple pre-loading to prepare the scale for use in various environments. The readings are automatically corrected for changes in temperature due to internal compensation and the fully electronic design. Most importantly, multi span calibration improves linearity and eliminates the use of manual correction tables.

#### **Battery or AC Power**

Rest assured you will never be without power. The scale is AC/DC powered by commercially available alkaline or rechargeable batteries and 120/220 VAC sources. The scale requires no special 12 volt batteries or gel cells which are costly and difficult to replace. If you lose power while the aircraft is loaded on the scale? - no problem. Just restore power without off loading the aircraft and the weight automatically reappears due to internal memory back up. Intrinsically safe, Factory Mutual Approved models are available.

#### **Customer Satisfaction**

Intercomp has supplied this system to the world's leading airlines, airframe manufacturers, defense contractors, maintenance centers and military branches. Our twenty plus years of experience in manufacturing scales has enabled us to provide the most sought after features and functions. Furthermore, our commitment to customer service and support has enabled us to keep our customers satisfied years after their purchase. Up to the minute service and support is provided by our factory in Minneapolis, MN, U.S.A. and service center located near Heathrow Airport, UK.

WE INVITE YOU TO LEARN MORE ABOUT THIS INNOVATIVE TECHNOLOGY BY CONTACTING INTERCOMP - THE WORLD LEADER IN AIRCRAFT WEIGHING SYSTEMS.

Web Site: www.intercompco.com E-mail: acscale@intercompco.com

## THE AC5-45LP IS AVAILABLE IN THREE PLATFORM CONFIGURATIONS.

Select the model that is best for you depending on your weighing requirements and fleet configuration.



#### AC5-15LP™

Designed for non-fixed wing, single engine, light regional and various military aircraft. The unit of choice for f.b.o.'s, light aircraft manufacturers, and military units.

#### **Capacities:**

to 15,000 lbs/ 7,500 kg

#### **Platform Size:**

15 L x 15 W x 1.6 H inches 381 L x 381 W x 40 H mm





#### **AC20-30LP™**

Weighs almost anything from twin engine to narrow body commercial aircraft. Ideal for maintenance centers and regional airlines.

#### **Capacities:**

to 30,000 lbs/ 15,000 kg

#### **Platform Size:**

22 L x 15 W x 1.6 H inches 558 L x 381 W x 40 H mm





#### **AC45-60LP™**

Lightweight and low profile solution for virtually all types of military and commercial aircraft. Designed to maximize full range accuracy to weigh anything from a F-16 to a B747. The most applicable model for maintenance centers and major airlines.

#### **Capacities:**

to 45,000 lbs/ 22,000 kg 60,000 lbs/ 27,000 kg

#### **Platform Size:**

24 L x 30 W x 2.9/4 H inches 610 L x 762 W x 73/100 H mm

\* Other sizes & capacities available



Web Site: www.intercompco.com

E-mail: acscale@intercompco.com

#### Accessories

Standard accessories include ramps and axle spacers (applicable by model). They are compact, lightweight and durable. All together, any configuration can be easily transported in the cargo bay of an aircraft. The system is packed in either a MIL SPEC transport case or specially designed transport cart with tow bar. Both have internal charging systems so all scales can be charged while in storage.

#### AC2000-RF CPU - Wireless Technology with ACWeigh Software

The AC2000-RF CPU is a user friendly and high performance method to centrally control and display all scale information. It utilizes Intercomp's renowned ACWeigh Software to provide a complete weight and balance report and serve as an inventory control manager of all weighing records.

The ACWeigh software uses step-by-step menus to weigh aircraft quickly and accurately. The program is optionally preprogrammed with the most common commercial configurations along with *arm lengths* and *out of level* correction tables. All data is capable of being automatically transferred to an MS Excel spreadsheet for use in any format.

The use of advanced frequency hopping spread spectrum (FHSS) telemetry eliminates the need for cables. No longer do you need to read the display at each scale. Set up your CPU at virtually any site within the hangar and you can simultaneously control and display up to 32 scales.

FHSS technology was developed by the U.S. military to prevent interference or interception of radio transmissions. Standard IR, RF and Direct Sequence wireless communication cannot match the distance, reliability and security of FHSS. Most importantly, FHSS operates on a license free frequency band.

Wireless technology expands the horizon for computing and transmitting data. Combined with the ACWeigh Software, this complete package enables you to simultaneously capture the results of a weighing, compute and verify required data and then transmit a complete report.

For customers whose local regulations prevent the use of any wireless radio communication, Intercomp offers infrared and hard wire alternatives to communicate directly with the ACWeigh software.

AC2000-RF CPU, Interconnect cables, AC Series Platform Scales and Intercomp Jack Weigh Kit digital output load cells are 100% interchangeable to give the customer total flexibility.



#### **OPTIONS:**

- Transport Cart
- Transport Case
- AC2000-RF CPU Computer
- ACWeigh Software
- Telemetry
- Infrared
- Remote Battery Charger
- Factory Mutual
  - Intrinsically Safe







## **Specifications**

Model	Category	AC5-15LP	AC20-30LP	AC45-60LP
Performance	Capacities	5,000, 10,000, 15,000 lbs / 2,500, 5,000, 7,500 kg	20,000, 30,000 lbs / 10,000, 15,000 kg	45,000, 60,000 lbs/ 22,000, 27,000 kg
	Graduation Accuracy	1, 2, 5 lbs/ 0.5, 1, 2 kg   5 lbs/ 2 kg   10 lbs/ 5 kg ±0.1% of applied load or ±1 graduation; whichever is greater		
Physical	Platform Size	15 L x 15 W x 1.6 H inches 381 L x 381 W x 40 H mm	22 L x 15 W x 1.6 H inches 558 L x 381 W x 40 H mm	24 L x 30 W x 2.9/4 H inches 610 L x 762 W x 73/100 H mm
	Weight	30 lbs/ 13.6 kg	48.5 lbs/ 22 kg	94 lbs/ 42.7 kg
	Construction	High Strength Aluminum Alloys		
Controls	General:	All controls housed within water tight keypad Stainless steel recessed switches Keypad & Display protected by lexan shield		
	On/Off:	Two separate switches for unambiguous operation		
	Zero:	Automatically zeros reading		
	lb/kg:	Sets unit of measure		
	Indications:	Low Battery, lb/kg, latitude/altitude, error messages		
Features	Latitude/Altitude Correction: Calibration:	Facility to enter values for correction of gravitational effects on mass (default 45°)  Multi-span keypad entry (required annually)		
		ion: Adjustable sampling of readings to minimize effects of artificial readings		
	Auto Shut-Off:	Turns scale off when not in use to conserve battery life (variable)		
	Backlight:	Automatic sensor illuminates display in low light conditions for improved visibility		
	Battery Backup:	Retains weight values due to loss of power		
	Error Messages:	Advises of errors in electronics to prevent erroneous readings		
	Low Battery Indication:	Advises of low battery status		
Electronics	Circuit Board: Transducer Type:	CMOS 20 bit ultra high precision A/D converter with high efficiency micro-controller Fully Electronic Shear Beam Load Cell		
	Input/Output:	RS232 or RS485		
	Display:	1"/25 mm high LCD		
	Power Source:	12 VDC, 120/220 VAC		
	Batteries:	Shipped with applicable commercially available AA or D size rechargeable batteries Will also accept commercially available AA or D size alkaline batteries		
	EMI/RFI:	Meets Mil-Spec 461 and Euro EMC directives		
	Humidity:	5-99% Non-condensing		
Temperature	Operating:	14°F to 122°F (-10°C to 50°C)		
	Storage:	-40°F to 170°F (-40°C to 75°C)		

Contact Intercomp for higher capacity AC30-60 platform scales or JW load cell kits for other aircraft weighing applications.

Specifications Subject To Change Without Notice.
AC5-15LP, AC20-30LP, AC45LP, AC5-45LP and AC45-60LP are registered trademarks of Intercomp Company.







3839 County Road 116 Medina, Minnesota 55340-9342 Toll Free: 800-328-3336

Worldwide: 763/476-2531 Fax: 763/476-2613

intercompco.com

E-mail: acscale@intercompco.com

# Jack Weigh Kit

Technology to the Limits... and Beyond



# Intercomp's wireless and cabled Jack Weigh Kits

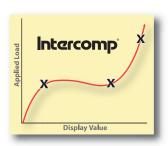
are the aviation industry's most user friendly, accurate and widely used top of jack weighing systems.

ISO 9001:2000 Registered



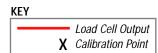
Intercomp's field proven weighing technology utilizes the world's highest quality load cells for the utmost in accuracy and ease-of-use.

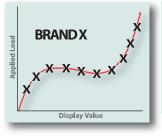
With the most precise load cells available on the market today, Intercomp makes your weighing program as efficient as it is accurate. Intercomp has over 25 years of experience in building high capacity/high accuracy weighing equipment and can meet your most stringent weighing requirements with ease.





- Intercomp features the industry's highest quality load cells which only require 3 calibration points. Other inferior load cells require 10 or more.
- Intercomp's high quality load cells feature User Configurable Calibration points for optimal linearity calculations.
- Higher quality load cells reduce the calibration workload by only requiring 3 points rather than multiple fixed points.





- Lower quality load cells require numerous calibration points to correct poor linearity performance.
- · More calibration points require more time and money be spent in the calibration lab.

## JW™ Digital Output Load Cell

At the heart of the Jack Weigh Kit is Intercomp's technologically advanced digital output load cell. The JW DOLC's have revolutionized the weighing of aircraft. With DOLC's, the analog to digital conversion is performed at the cell itself. This means each cell is its own independently operating scale.

Any JW DOLC can be plugged into any channel or wireless node - there are no precalibrated or color coded channels. And, if a cell, cable or wireless node is damaged, simply replace the unit with an off-the-shelf spare. All Intercomp CPU's, cables, wireless nodes and load cells are completely interchangeable, there's no need to return the entire kit to the manufacture for repair or recalibration. This feature sharply reduces repair and shipping costs, yet ensures you will seldom be without your Jack Weigh Kit.



Our advanced digital output signal is so powerful that it eliminates EMI/RFI, but yet maximizes linearity to provide full range accuracy of ±0.1%. This field proven technology increases repeatability and virtually eliminates side loading.

- · Low profile design ensures each load cell will fit nearly any jack to jack point envelope.
- · Interchangeable adapters accommodate a wide range of loading fixtures as described in SAE-AS33559
- · Flexibility to weigh a wide variety of aircraft with a standard load cell used in conjunction with readily available custom interchangeable adapters.

## Jack Weigh Kit™

Intercomp's Jack Weigh Kit comes complete with the AC100 CPU, JW load cells, interconnect cables, jack and a/c adapters, battery charger, manuals and MIL-SPEC 810D carrying case to fully protect and transport the system.

A leveling kit complete with all accessories is available as an option. Intercomp also manufactures a complete line of calibration systems traceable to the National

Each Intercomp Jack Weigh Kit is designed and tested to meet the stringent United States Air Force specifications for accuracy, reliability, serviceability and performance. The design criteria, combined with proven field performance, ensures that the Jack Weigh Kit is the industry leader for aircraft weighing systems. With its combination of cells and capacities, the Jack Weigh Kit can weigh any aircraft in the world.



# Intercomp

# Jack Weigh Kit Solutions



### Wireless Jack Weigh Kit

Intercomp's wireless Jack Weigh Kit eliminates the use of cables. No longer will the user need to run cables between each load cell and the CPU. All Intercomp wireless Jack Weigh kits include:

- Complete Interchangeability: If a wireless node is ever broken or damaged, simply replace it with a spare radio. The load cell does not need to be returned for service
- Multiple Display Options: The Wireless Jack Weigh Kit can be used with either a PDA, AC100 CPU or PC. If any of these devices are damaged and rendered inoperable, another display device can be used as a spare without programming or calibration.
- Cable Backup (optional): Intercomp offers a wireless load cell kit that allows for the use of cables as a backup system.
- Allowing this cable backup is critical in ensuring that the kit is
  operable in all conditions. There are many conditions that can
  affect the ability of a load cell kit to transmit over a wireless signal.
  These include: interference in a hangar, deployed overseas, or rules
  on transmitting a wireless signal. Not having a cable backup renders
  the load cell kit worthless if there is ever a problem with the wireless
  signal. By having this cable backup, you are ensured to always
  complete your weigh job.



- Wireless weighing saves time and increases the efficiency and safety of weighing operations.
- Intercomp AC Weigh software can be used with a PDA or a PC.
- · Wireless system can drive up to 50 load cells.



### AC100™ Central Processing Unit

Intercomp's cabled Jack Weigh Kits come standard with the proven AC100 Central Processing Unit. The AC100 gives you the most sought after functions and features, yet remains user friendly at all times.

All Intercomp cabled Jack Weigh Kits include:

- Easy to read jumbo sized 4 line x 20 character alphanumeric LCD screen.
- Push button menus for computations, memory storage, and full c.g. printout.
- Plug-and-Play capability with no switches to flip or knobs to turn.
- · Calibration performed through use of the keypad.
- · Meets EMI-RFI requirements of MIL-SPEC 461.
- · Operates on all power sources.
- · Fully weatherproof.

#### **AC100 Central Processing Unit**



- AC100 can be used as the display for a wireless system with onboard printing.
- Existing AC100s can be upgraded to wireless versions.
- · System can drive up to 32 load cells.

### Jack Weigh Kit™ Features

- All JW DOLCs wireless nodes and cables are interchangeable no precalibrated channels
- Spare JW DOLCs, wireless nodes and cables available with kit
- Accuracy of ±0.1% of applied load or ±0.02% of channel capacity
- Center of gravity computation input of arm lengths automatically computes c.g.
- Jack weigh kit can drive up to 50 cells for weighing multiple points during cradle operations
- · Latitude and altitude correction built into software
- Shows groups of weights for cradle weighing
- Gross, net and tare weight functions
- Self-diagnostics check
- EMI/RFI protection
- Auto zero tracking
- Digital filtering average of several internal weights gives steady readings for unstable conditions
- Load cells are fully sealed to prevent environmental damage
- Input/Output: RS232, RS485 or 20mA for interface with computers
- Operates on all power source 12VDC, 24VDC,120/220VAC
- Operating temperature 14°F to 122°F/10°C to 50°C
- Storage temperature -40°F to 170°F/-40°C to 75°C
- · Full print out of all functions
  - -individual cell and total weight
  - -net, tare and group weight
  - -aircraft ID, date, time, user, location, kit serial #
  - -calibration performance
  - -center of gravity and arm length

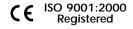
#### Handheld Wireless Features

- · AC Weigh Software can be used with handheld PDA or PC
- Handheld PDA displays up to 50 cells for measuring multiple weigh points during cradle operations
- Store weighings to be viewed, printed, or exported to AC Weigh PC software
- · Save multiple aircraft types with their CG properties
- · Printout full-page results with an IR or Bluetooth enabled printer
- 868 Mhz, 900 Mhz and 2.4 Ghz Frequency options
- MAC %

#### AC100 CPU Features

- Large 2.6" LCD screen with back light for low light visibility
- 0.5" high characters 4 x 20 screen
- AC100 CPU displays up to 32 cells for measuring multiple weigh points during cradle operations
- · One touch print, cg, set arm, zero buttons
- Water and oil tight control panel
- Lbs/kg selectable readout
- Adjustable viewing angle





# intercompco.com

### **Custom Applications**

Intercomp manufactures custom systems for virtually any application to meet the most exacting special requirements of customers throughout the world. Please contact Intercomp for further details should your project call for a custom weighing application.

- Multiple adapters for numerous applications
- Threaded top and bottom
- 500 lbs. to 100 tons
- 10,000 divisions

**Tension/Compression** 





Intercomp Company, Inc. is the world's largest manufacturer of portable weighing solutions, and has been serving the industrial, material handling and transportation industries for over 25 years. With ISO 9001 Registered facilities in the United States and United Kingdom and all standards traceable to NIST, we can deliver the products to meet your most exacting specifications. See for yourself how Intercomp provides advanced weighing technology... by any measure.



3839 County Road 116 Medina, Minnesota 55340 U.S.A. All Rights Reserved

Toll Free: 800-328-3336 Worldwide: 763/476-2531 • Fax: 763/476-2613

acscale@intercompco.com