

RPA455x / RPA455xx

Smart Paint Scales

Installationsanleitung

Farbwaagen

Manuel d'installation

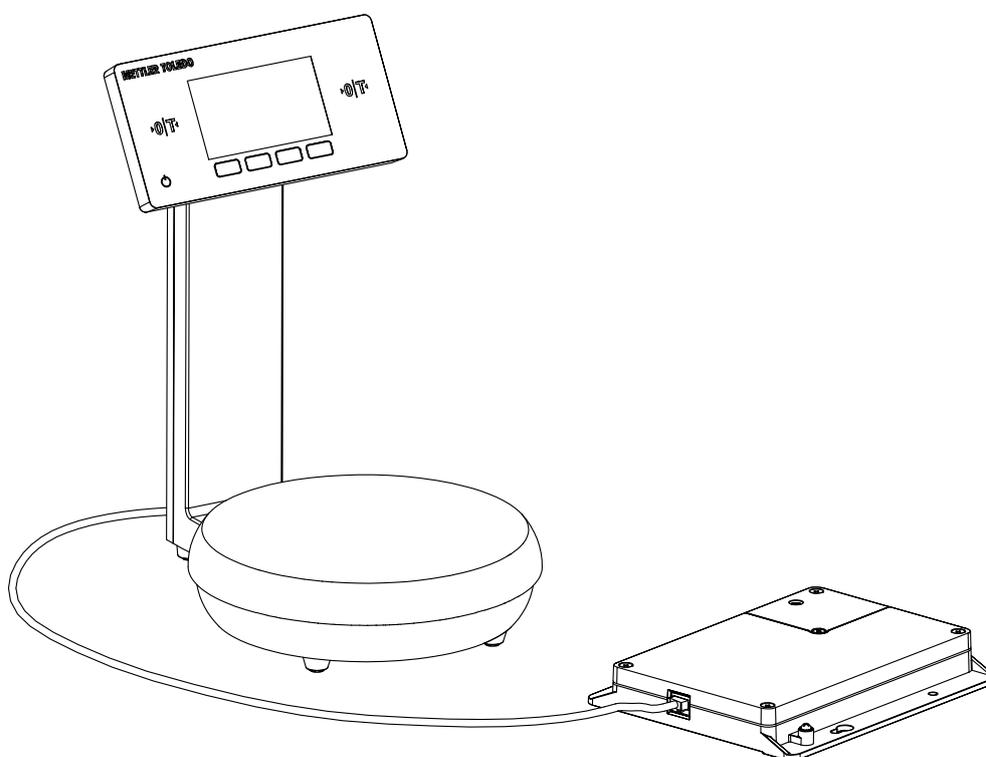
Peinture intelligentes

Manual de instalación

Básculas de pintura inteligentes

Manual de instalação

balanças inteligentes para tintas



METTLER TOLEDO

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There are several important ways to ensure you maximize the performance of your investment:

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- 2. Contact METTLER TOLEDO for service:** The value of a measurement is proportional to its accuracy – an out of specification scale can diminish quality, reduce profits and increase liability. Timely service from METTLER TOLEDO will ensure accuracy and optimize uptime and equipment life.
 - a. Installation, Configuration, Integration and Training:** Our service representatives are factory-trained, weighing equipment experts. We make certain that your weighing equipment is ready for production in a cost effective and timely fashion and that personnel are trained for success.
 - b. Initial Calibration Documentation:** The installation environment and application requirements are unique for every industrial scale so performance must be tested and certified. Our calibration services and certificates document accuracy to ensure production quality and provide a quality system record of performance.
 - c. Periodic Calibration Maintenance:** A Calibration Service Agreement provides on-going confidence in your weighing process and documentation of compliance with requirements. We offer a variety of service plans that are scheduled to meet your needs and designed to fit your budget.
 - d. GWP® Verification:** A risk-based approach for managing weighing equipment allows for control and improvement of the entire measuring process, which ensures reproducible product quality and minimizes process costs. GWP (Good Weighing Practice), the science-based standard for efficient life-cycle management of weighing equipment, gives clear answers about how to specify, calibrate and ensure accuracy of weighing equipment, independent of make or brand.

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This device complies with Part 15 of the FCC Rules and the Radio Interference Requirements of the Canadian Department of Communications. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her expense.

RoHS Compliance Statement.

- In 2006, the European Union (EU) Directive on the Restriction of the use of certain Hazardous Substances (RoHS, 2002/95/EU) went into effect. In 2011, the EU RoHS Directive was recast (2011/65/EU) and went into effect January 3, 2013. The Directive is to restrict the use of cadmium, hexavalent chromium, lead, mercury and certain halogenated flame retardants (PBBs and PBDEs) in electronic products. In 2015, EU RoHS was amended (2015/863/EU) to restrict four phthalates (DEHP, BBP, DBP, DIBP) by July 22, 2019.
- Based on these inquiries and other procedures, METTLER TOLEDO fulfils its requirements of RoHS and that our products fully comply with the above mentioned Directive.

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RPA455x / RPA455xx Installation Manual Change Notice

Date (MM/DD/YYYY)	Changes	Revision
10/21/2019	Official Launch	A

Safety Instructions

- Read the installation manual carefully before installing the scale.
- Strictly observe this manual and save it for future use.

	⚠ WARNING
	Only permit qualified personnel to make checks, tests and adjustments to be carried out with power on. Failing to observe these precautions can result in bodily harm.
	⚠ WARNING
	Always disconnect the scale from the USB Power & Data Barrier before installing, servicing, cleaning or performing maintenance.
	⚠ WARNING
	Check the cable of the AC adapter and USB Power & Data Barrier regularly. The scale must not be used when the cable is damaged.
	⚠ CAUTION
	Treat the scale carefully. Knocks to the weighing platter or overloading it excessively will damage the scale.
	⚠ CAUTION
	Only use recommended accessories and peripherals.
	⚠ CAUTION
	Do not open the scale. The warranty is void if this stipulation is ignored. The scale may only be opened by authorized personnel.

Cautionary Notes Regarding Installation

	⚠ WARNING
	Do not operate the scale if its housing, USB Power & Data Barrier, AC adapter including all connections are damaged. Disconnect the damaged device from the power.
	⚠ CAUTION
	The device must only be used indoor. Avoid generating static electricity on glass and plastic parts. Only clean the devices as stipulated in the cleaning instructions, and disconnect the devices from the power before cleaning.

	<p style="text-align: center;">⚠ CAUTION</p> <p>Do not touch the surface of the touch screen with sharp, pointed, rough, or hard objects. Take care of the glass panel, in case it is damaged, disconnect the device from the power immediately.</p>
	<p style="text-align: center;">⚠ CAUTION</p> <p>Lay the cables where they will not be damaged by any sharp edges or pose any risk of causing someone to trip.</p>
	<p style="text-align: center;">⚠ CAUTION</p> <p>The device meets IP40 protection rating requirements. Please handle this device according to its IP protection rate and properly secure the environment where the device operates.</p>
	<p style="text-align: center;">⚠ CAUTION</p> <p>Only use accessories supplied by METTLER TOLEDO. Make sure that the voltage rating printed on the AC adapter is identical to your local mains voltage. It is essential to comply with national regulations regarding grounding connections.</p>
	<p style="text-align: center;">⚠ CAUTION</p> <p>Do not expose the device to extreme temperatures, aggressive chemical vapors, shocks, moisture, vibrations, or strong electromagnetic fields. Chemicals must be kept away from cables, plastic covers, and other corrosion prone components.</p>

1 Introduction

1.1 About This Manual

This installation manual contains information about installing and all requirements necessary for safe use of the system. For more information about this product, please visit www.mt.com/ind-paint-mixing-scale.

This installation manual applies to the following smart paint scales:

- RPA455x
- RPA455xx

1.2 Intended Use

Use RPA455x or RPA455xx for weighing only. Any other type of use and operation beyond the limits of technical specifications without written consent from Mettler-Toledo is considered as not intended.

1.2.1 Application Areas

- RPA455x is for use in hazardous areas classified as
 - EN / IEC: Zone 1
 - North America: Division 1 / Zone 1
- RPA455xx is for use in hazardous areas classified as
 - EN / IEC: Zone 2

1.2.2 Ambient Conditions

The environment where this scale is operated should meet the following requirements:

- Indoor environment.
- Temperatures and humidity:
 - 0°C to 40°C (32°F to 104°F) at 10% to 85% relative humidity non-condensing
 - 0°C to 35°C (32°F to 95°F) at 10% to 85% relative humidity non-condensing (for metrological approved models)

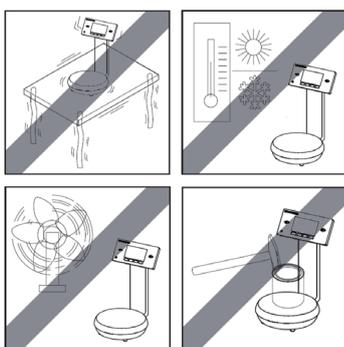
2 Installation

2.1 Unpacking and Inspection

Check the contents and inspect the supply immediately upon delivery. If the shipping container is damaged upon arrival, check the contents for damage and, if necessary, submit a damage claim to the transport agency. If the container is not damaged, remove the device from the protective packaging; note how it was packaged and check all components for damage.

If the device must be shipping again, the original packaging should be reused. The device must be correctly packed to ensure safe transportation. Unplug all cables before transporting.

2.2 Selecting the Location



For accurate weighing results, care must be taken to select the optimal location for the scale!

- Place the scale on a stable surface which is free of vibrations and as horizontal as possible.
- Avoid excessively fluctuating temperatures and direct sunlight. Ensure correct environment conditions.
- Avoid drafts (for example, from fans or air conditioner).
- Never use a hammer to close paint cans on the weighing platter.



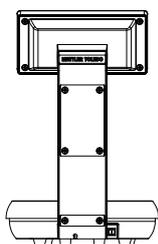
NOTE:

Condensation from humidity can form on the surfaces of a cold device when it is brought into a substantially warmer area.

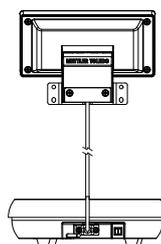
Disconnect the device from power and allow it to acclimatize for approximately 2 hours before reconnecting it to the power.

2.3 Scale Configurations

RPA455x and RPA455xx support standard, wall-mount, and base-only configurations to meet different installation requirements in customer site. For dimensions of each configuration, please go to **Dimensions**.



Standard Configuration



Wall-mount Configuration

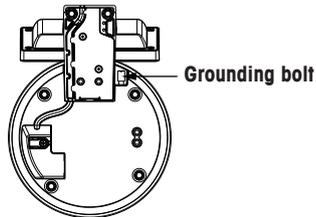


Base-only Configuration

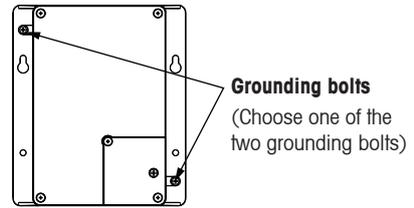
2.4 Installing RPA455x in Hazardous Area Zone 1/ Division 1

RPA455x is designed for use in hazardous area Zone 1 / Division 1. Choose one of the following two wiring solutions to install RPA455x.

Please note that both RPA455x and APS455x must be grounded.

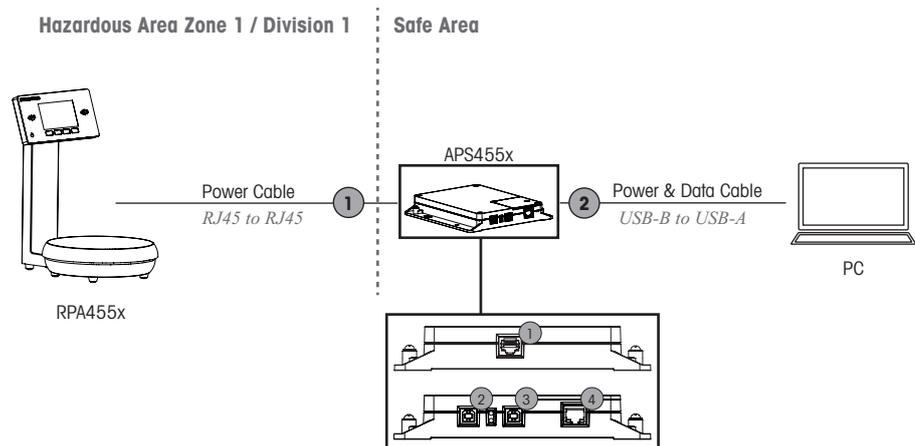


RPA455x

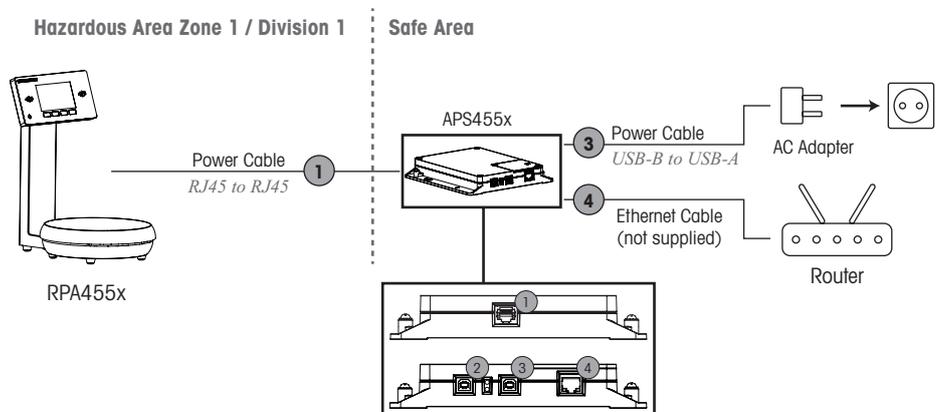


APS455x

Solution 1: Wiring for power input and RS232 communications through APS455x



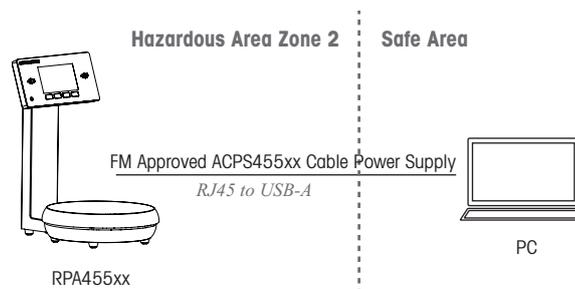
Solution 2: Wiring for power input and Ethernet communications through APS455x and AC adapter



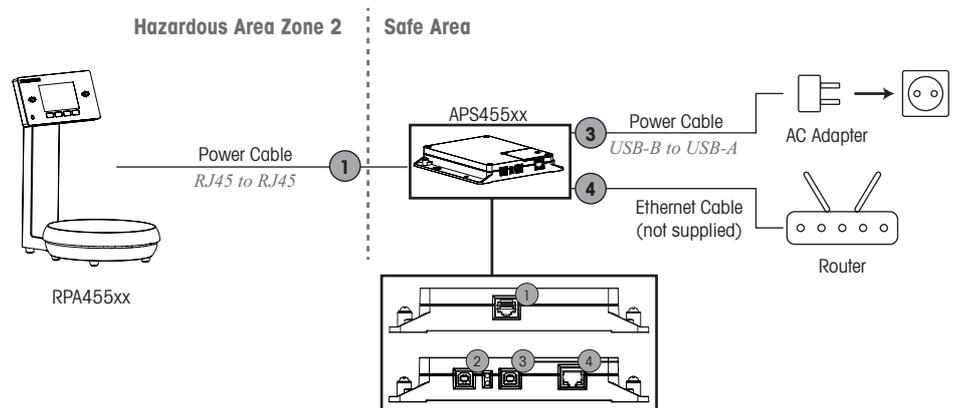
2.5 Installing RPA455xx in Hazardous Area Zone 2

RPA455xx is designed for use in hazardous area Zone 2. Choose one of the following two wiring solutions to install RPA455xx.

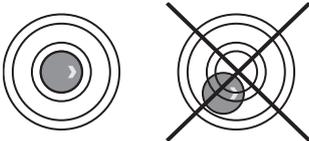
Solution 1: Wiring for power input and RS232 communications



Solution 2: Wiring for power input and Ethernet communications through APS455xx and AC adapter



2.6 Levelling



The scale should be perfectly horizontal to ensure consistent, reproducible weighing results. Relevel the scale each time its location is changed.

Please note that all metrological approved scales are providing a levelling bubble.

→ Turn the adjustable feet until the level bubble is within the ring marking.

2.7 Warming Up



→ Warm up the scale for at least 30 minutes after initial connection to the USB Power and Data Barrier.

▲ Doing so allows the scale to reach the required operating temperature and, consequently, deliver accurate weighing results.

3 Technical Data

Specifications	Non metrological-approved models	Metrological approved models
Capacity	7500 g / 999.95 g	Min. 5 g, Max. 7500 g
Verification interval e	Not applicable	1 g
Readability	0.1 g / 0.05 g	0.1 g
Weighing units	g, kg, oz, P (1 P = 1/32 oz)	g
Ambient operation conditions	For indoor use only, 0°C - 40°C / 32°F - 104°F, at relative humidity of 10% to 85% non-condensing	For indoor use only, 0°C - 35°C / 32°F - 95°F, at relative humidity of 10% to 85% non-condensing
Internal Application	<ul style="list-style-type: none"> • Calculation by Factor • Mixing without Formula • Mixing with Formula • Recalculation (over-pour correction) • Formula Management • BBA242 Mode 	<ul style="list-style-type: none"> • Mixing without Formula • Mixing with Formula • Recalculation (over-pour correction) • Formula Management • BBA242 Mode
Stabilization time	Less than 1 second	
Tare Range	-7500 g	
Switch-on zero range	± 750 g	
Weighing platter	Φ234 mm	
Display / Keyboard	Colorful TFT LCD Capacitive Touch Screen	
Language	English, Chinese, German, French, Spanish, Portuguese	
IP Protection	IP40 in accordance with EN 60529/IEC 60529	
Interface connection	USB and Ethernet optional (APS455x / APS455xx) or USB (ACPS455xx Cable Power Supply)	
Power Supply	USB 2.0 or higher, or AC adapter PSAI05R-050QL6	
Input voltage Power consumption	5 VDC 5 W	
Storage and shipping	-10°C - 60°C, at relative humidity of 5% to 95% non-condensing	
Overvoltage category	II	
Pollution degree	II	
Weight (net / gross)	5.4 kg / 6.5 kg (Model with 20m cable and barrier)	

Sicherheitshinweise

- Lesen Sie vor der Installation der Waage gründlich die Installationsanleitung durch.
- Halten Sie sich streng an diese Anleitung und bewahren Sie sie für den zukünftigen Gebrauch auf.

	⚠️ WARNUNG
	Überprüfungen, Tests und Einstellungen, bei denen die Stromversorgung eingeschaltet sein muss, nur von qualifizierten Fachkräften durchführen lassen. Die Nichtbeachtung dieser Vorsichtsmassnahmen kann Körperverletzungen zur Folge haben.
	⚠️ WARNUNG
	Vor der Installation, Instandhaltung, Reinigung und Wartung muss die Waage immer von der USB Power and Data Barrier getrennt werden.
	⚠️ WARNUNG
	Überprüfen Sie regelmässig das Kabel des AC-Adapters und der USB Power and Data Barrier. Wenn das Kabel beschädigt ist, darf die Waage nicht verwendet werden.
	⚠️ ACHTUNG
	Gehen Sie sorgsam mit der Waage um. Durch Stösse gegen die Wägeplatte oder eine extreme Überladung der Wägeplatte wird die Waage beschädigt.
	⚠️ ACHTUNG
	Verwenden Sie nur empfohlenes Zubehör und empfohlene Zusatzgeräte.
	⚠️ ACHTUNG
	Öffnen Sie die Waage nicht. Bei Nichtbeachtung dieser Anweisung erlischt die Garantie. Das Öffnen der Waage ist nur durch berechtigtes Personal erlaubt.

Warnhinweise zur Installation

	⚠️ WARNUNG
	Die Waage darf nicht betrieben werden, wenn die USB Power and Data Barrier, der AC-Adapter und alle Anschlüsse beschädigt sind. Trennen Sie das beschädigte Gerät von der Stromversorgung.
	⚠️ ACHTUNG
	Das Gerät darf nur in Innenräumen verwendet werden. Vermeiden Sie die elektrostatische Aufladung von Glas- und Kunststoffteilen. Reinigen Sie die Geräte nur wie in den Reinigungsempfehlungen angegeben und trennen Sie die Geräte vor der Reinigung von der Stromversorgung.

	<p style="text-align: center;">⚠ ACHTUNG</p> <p>Berühren Sie die Oberfläche des Touchscreen niemals mit scharfen, spitzen, rauen oder harten Objekten. Gehen Sie sorgsam mit der Glaswand um. Falls diese beschädigt ist, muss das Gerät sofort von der Stromversorgung getrennt werden.</p>
	<p style="text-align: center;">⚠ ACHTUNG</p> <p>Verlegen Sie die Kabel so, dass sie nicht durch scharfe Kanten beschädigt werden oder eine Stolpergefahr darstellen.</p>
	<p style="text-align: center;">⚠ ACHTUNG</p> <p>Das Gerät erfüllt die Anforderungen der Schutzart IP40. Bitte handhaben Sie dieses Gerät gemäss der IP-Schutzart und sichern Sie die Betriebsumgebung des Geräts ordnungsgemäss ab.</p>
	<p style="text-align: center;">⚠ ACHTUNG</p> <p>Verwenden Sie nur das von METTLER TOLEDO bereitgestellte Zubehör. Stellen Sie sicher, dass die auf dem AC-Adapter angegebene Betriebsspannung mit Ihrer örtlichen Netzspannung übereinstimmt. Die nationalen Bestimmungen zu Erdungsanschlüssen müssen zwingend eingehalten werden.</p>
	<p style="text-align: center;">⚠ ACHTUNG</p> <p>Setzen Sie das Gerät keinen extremen Temperaturen, aggressiven chemischen Dämpfen, Stößen, Feuchte, Vibrationen oder starken elektromagnetischen Feldern aus. Chemikalien müssen von Kabeln, Kunststoffabdeckungen und anderen korrosionsanfälligen Komponenten ferngehalten werden.</p>

1 Einführung

1.1 Über dieses Handbuch

Diese Installationsanleitung enthält Informationen zur Installation sowie zu allen notwendigen Voraussetzungen für die sichere Verwendung des Systems. Weitere Informationen zu diesem Produkt finden Sie unter www.mt.com/ind-paint-mixing-scale.

Diese Installationsanleitung gilt für die folgenden Farbwaagen:

- RPA455x
- RPA455xx

1.2 Bestimmungsgemäße Verwendung

Verwenden Sie RPA455x oder RPA455xx nur zum Wägen. Jegliche anderweitige Verwendung, die über die Grenzen der technischen Spezifikationen hinausgeht, gilt ohne schriftliche Absprache mit Mettler-Toledo als nicht bestimmungsgemäss.

1.2.1 Anwendungsgebiete

- RPA455x ist für den Einsatz in Ex-Bereichen klassifiziert gemäss

EN/IEC:	Zone 1
Nordamerika:	Division 1 / Zone 1
- RPA455xx ist für den Einsatz in Ex-Bereichen klassifiziert gemäss

EN/IEC:	Zone 2
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1.2.2 Umgebungsbedingungen

Die Umgebung, in der die Waage betrieben wird, muss die folgenden Anforderungen erfüllen:

- Innenraum
- Temperatur und Luftfeuchtigkeit:
 - 0 bis 40 °C (32 bis 104 °F), bei 10 % bis 85 % relativer Feuchte, nicht kondensierend
 - 0 bis 35 °C (32 bis 95 °F), bei 10 % bis 85 % relativer Feuchte, nicht kondensierend (bei eichfähigen Ausführungen)

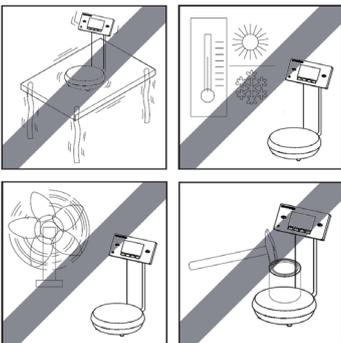
2 Installation

2.1 Auspacken und Prüfen

Überprüfen Sie den Inhalt und inspizieren Sie die Lieferung sofort nach der Zustellung. Sollte der Versandbehälter bei der Auslieferung beschädigt sein, prüfen Sie den Inhalt auf Schäden und reichen Sie ggf. eine Schadensmeldung beim Transportunternehmen ein. Wenn der Behälter nicht beschädigt ist, nehmen Sie das Gerät aus der Schutzpackung heraus; achten Sie darauf, wie es verpackt war und inspizieren Sie alle Komponenten auf Schäden.

Wenn das Gerät wieder verschickt werden muss, sollte unbedingt die Originalverpackung verwendet werden. Das Gerät muss korrekt verpackt werden, um einen sicheren Transport zu gewährleisten. Entfernen Sie vor dem Transport alle Kabel.

2.2 Auswahl des Standorts



Um genaue Wägeresultate zu erreichen, muss der optimale Standort der Waage sorgfältig ausgewählt werden.

- Stellen Sie die Waage auf eine stabile Oberfläche, die frei von Vibrationen und so waagrecht wie möglich ist.
- Vermeiden Sie extreme Temperaturschwankungen und direkte Sonneneinstrahlung. Stellen Sie die richtigen Umgebungsbedingungen sicher.
- Vermeiden Sie Zugluft (z. B. von Lüftern oder Klimaanlage).
- Verwenden Sie niemals einen Hammer, um die Farbdosen auf der Wägeplatte zu verschliessen.



HINWEIS:

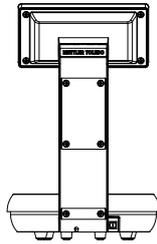
Auf der Oberfläche eines kalten Geräts kann es durch Feuchte zu Kondensation kommen, wenn es in einen wesentlich wärmeren Bereich gebracht wird.

Trennen Sie das Gerät von der Stromversorgung und lassen Sie es ca. zwei Stunden lang akklimatisieren, bevor Sie die Stromversorgung wiederherstellen.

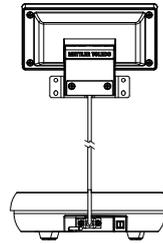
2.3 Waagenkonfigurationen

RPA455x und RPA455xx sind für die Standardkonfiguration, die Konfiguration mit Wandbefestigung und die Konfiguration nur mit Basiseinheit geeignet, um den

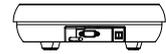
verschiedenen Installationsanforderungen am Standard des Kunden gerecht zu werden. Die Abmessungen jeder Konfiguration finden Sie unter **Dimensions**.



Standardkonfiguration



Konfiguration mit Wandbefestigung

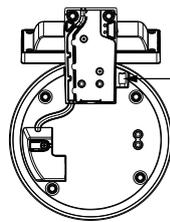


Konfiguration nur mit Basiseinheit

2.4 Installation von RPA455x in Ex-Bereichen der Zone 1/Division 1

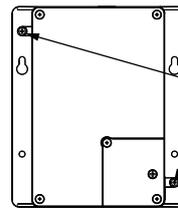
RPA455x ist für den Einsatz in Ex-Bereichen der Zone 1/Division 1 ausgelegt. Wählen Sie für die Installation von RPA455x eine der beiden folgenden Verkabelungslösungen aus.

Bitte beachten Sie, dass sowohl RPA455x als auch APS455x geerdet sein müssen.



RPA455x

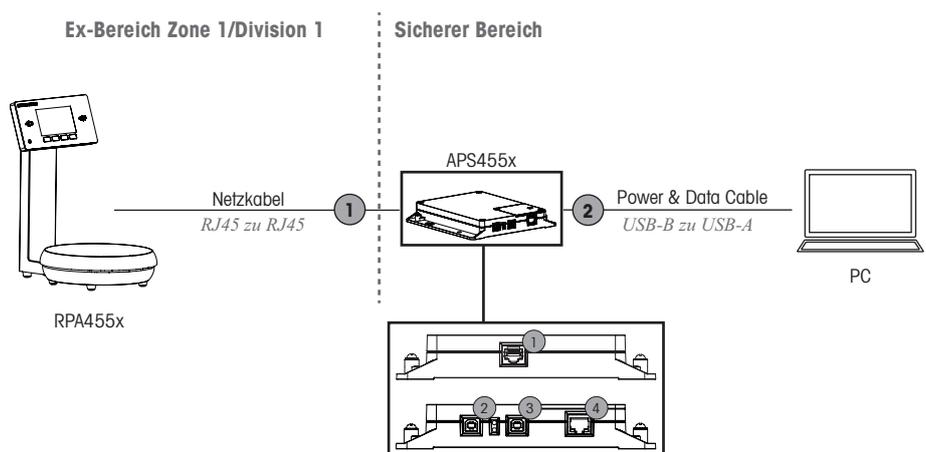
Erdungsbolzen



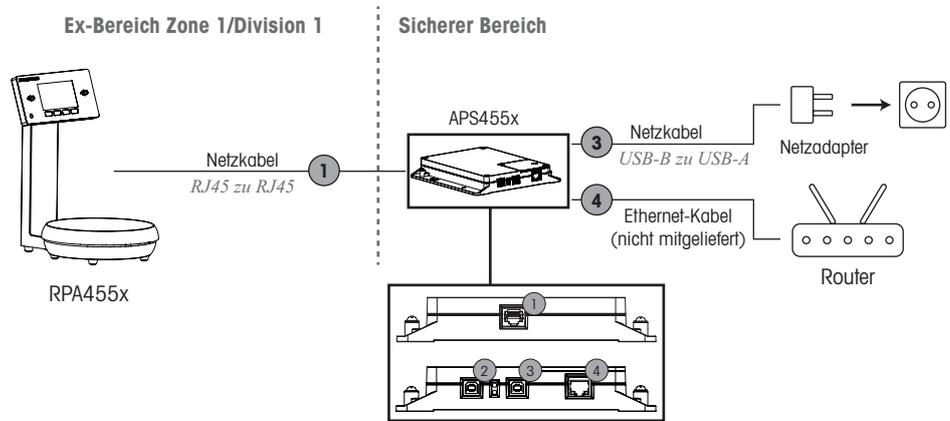
APS455x

Erdungsbolzen
(Wählen Sie einen der beiden Erdungsbolzen aus)

Lösung 1: Verkabelung für Stromaufnahme und RS232-Kommunikation über APS455x



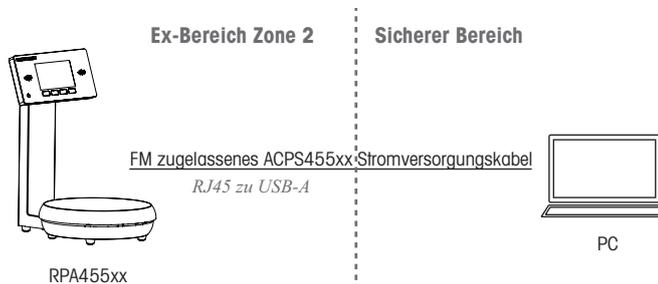
Lösung 2: Verkabelung für Stromaufnahme und Ethernet-Kommunikation über APS455x und AC-Adapter



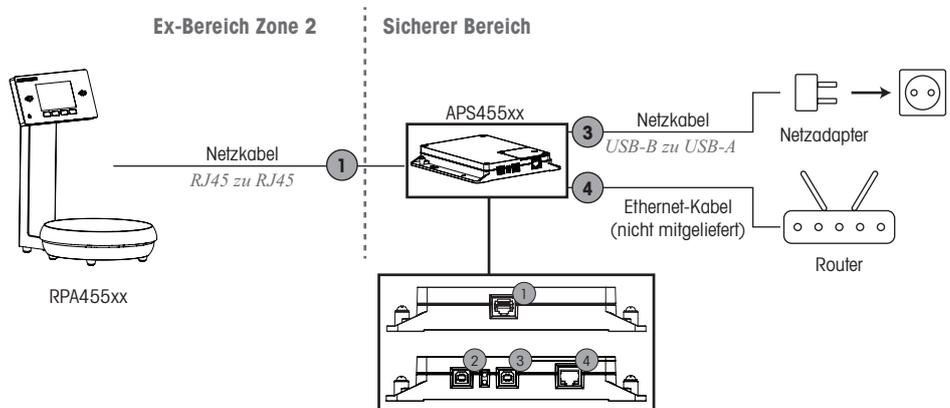
2.5 Installation von RPA455xx in Ex-Bereichen der Zone 2

RPA455xx ist für den Einsatz in Ex-Bereichen der Zone 2 ausgelegt. Wählen Sie für die Installation von RPA455xx eine der beiden folgenden Verkabelungslösungen aus.

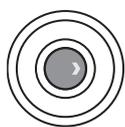
Lösung 1: Verkabelung für Stromaufnahme und RS232-Kommunikation



Lösung 2: Verkabelung für Stromaufnahme und Ethernet-Kommunikation über APS455xx und AC-Adapter



2.6 Nivellieren



Die Waage sollte sich in einer vollständig waagerechten Position befinden, um konsistente, reproduzierbare Wägeresultate zu gewährleisten. Jedes Mal, wenn der Standort der Waage gewechselt wird, muss die Waage neu nivelliert werden.

Bitte beachten Sie, dass alle eichfähigen Waagen über eine Libelle verfügen.

→ Drehen Sie die einstellbaren Füße, bis sich die Libelle innerhalb der Ringmarkierung befindet.

2.7 Aufwärmen



→ Lassen Sie die Waage mindestens 30 Minuten lang nach der ersten Verbindung mit der USB Power and Data Barrier aufwärmen.

▲ So kann die Waage die erforderliche Betriebstemperatur erreichen und folglich genaue Wägeresultate liefern.

3 Technische Daten

Spezifikationen	Nicht eichfähige Ausführungen	Eichfähige Ausführungen
Höchstlast	7500 g / 999,95 g	Min. 5 g, max. 7500 g
Eichintervalle	Nicht anwendbar	1 g
Ablesbarkeit	0,1 g / 0,05 g	0,1 g
Wä geeinheiten	g, kg, oz, P (1 P = 1/32 oz)	g
Betriebsbedingungen	Nur für den Innenbereich, 0 – 40°C / 32 – 104°F, bei relativer Luftfeuchtigkeit von 10 – 85 %, nicht kondensierend	Nur für den Innenbereich, 0 – 35°C / 32 – 95°F, bei relativer Luftfeuchtigkeit von 10 – 85 %, nicht kondensierend
Interne Anwendung	<ul style="list-style-type: none"> • Faktorverrechnung • Mischen ohne Formel • Mischen mit Formel • Neuberechnung (Korrekturvorgang bei Überdosieren) • Formelverwaltung • BBA242-Modus 	<ul style="list-style-type: none"> • Mischen ohne Formel • Mischen mit Formel • Neuberechnung (Korrekturvorgang bei Überdosieren) • Formelverwaltung • BBA242-Modus
Einschwingzeit	Weniger als 1 Sekunde	
Tarabereich	-7500 g	
Nullstellbereich beim Einschalten	± 750 g	
Wägeplatte	Φ234 mm	
Anzeige/Tastatur	Kapazitiver TFT-LCD-Farb-Touchscreen	
Sprache	Englisch, Chinesisch, Deutsch, Französisch, Spanisch, Portugiesisch	
IP-Schutzart	IP40 gemäss EN 60529/IEC 60529	
Schnittstellenanschluss	USB und Ethernet optional (APS455x/APS455xx) oder USB (ACPS455xx Stromversorgungskabel)	
Stromversorgung	USB 2.0 oder höher, oder AC-Adapter PSAI05R-050QL6	
Eingangsspannung Stromverbrauch	5 VDC 5 W	
Lagerung und Versand	-10 – 60 °C, bei relativer Luftfeuchtigkeit von 5 – 95 %, nicht kondensierend	
Überspannungskategorie	II	
Verschmutzungsgrad	II	
Gewicht (netto/brutto)	5,4 kg/6,5 kg (Modell mit 20-m-Kabel und Sperre)	



Consignes de sécurité

- Lire attentivement le manuel d'installation avant d'installer la balance.
- Respecter ce manuel à la lettre et le conserver pour toute référence ultérieure.

	<p style="text-align: center;">⚠ AVERTISSEMENT</p> <p>Autoriser uniquement du personnel qualifié à réaliser des contrôles, des tests et des réglages lorsque la balance est allumée. Le non-respect de ces précautions peut entraîner des préjudices corporels.</p>
	<p style="text-align: center;">⚠ AVERTISSEMENT</p> <p>Toujours débrancher la balance du USB Power & Data Barrier avant toute opération d'installation, de maintenance, de nettoyage ou de réparation.</p>
	<p style="text-align: center;">⚠ AVERTISSEMENT</p> <p>Check the cable of the AC adapter & USB Power and Data Barrier regularly. La balance ne doit pas être utilisée lorsque le câble est endommagé.</p>
	<p style="text-align: center;">⚠ ATTENTION</p> <p>Manipuler la balance avec précaution. Les chocs ou la surcharge excessive du plateau de pesage peuvent endommager la balance.</p>
	<p style="text-align: center;">⚠ ATTENTION</p> <p>Utiliser uniquement des accessoires et des périphériques recommandés.</p>
	<p style="text-align: center;">⚠ ATTENTION</p> <p>Ne pas ouvrir la balance. La garantie est nulle et non avenue en cas de non-respect de cette condition. Seul le personnel habilité est autorisé à ouvrir la balance.</p>

Mises en garde concernant l'installation

	<p style="text-align: center;">⚠ AVERTISSEMENT</p> <p>Do not operate the scale if its housing, USB Power & Data Barrier, AC adapter including all connections are damaged. Débrancher la balance endommagée de l'alimentation.</p>
	<p style="text-align: center;">⚠ ATTENTION</p> <p>La balance doit être utilisée uniquement à l'intérieur. Éviter de générer de l'électricité statique sur des pièces en verre ou en plastique. Nettoyer uniquement la balance tel qu'indiqué dans les instructions de nettoyage et la débrancher de l'alimentation avant de la nettoyer.</p>

	⚠ ATTENTION
	<p>Ne pas toucher la surface de l'écran tactile avec des objets coupants, pointus, rugueux ou durs. Prendre soin du panneau en verre ; en cas de dommage, débrancher immédiatement la balance de l'alimentation.</p>
	⚠ ATTENTION
	<p>Installer les câbles à un endroit où ils ne risquent pas d'être endommagés par des bords coupants ou de provoquer la chute de quelqu'un.</p>
	⚠ ATTENTION
	<p>La balance respecte les exigences de protection IP40. Il convient d'utiliser la balance conformément à son indice de protection IP et de sécuriser son environnement de fonctionnement.</p>
	⚠ ATTENTION
	<p>Utiliser uniquement des accessoires fournis par METTLER TOLEDO. S'assurer que la tension indiquée sur l'adaptateur secteur est identique à la tension du secteur. Il est essentiel de respecter les réglementations nationales relatives à la mise à la terre.</p>
	⚠ ATTENTION
	<p>Ne pas exposer la balance à des températures extrêmes, des vapeurs de produits chimiques agressifs, des chocs, de l'humidité, des vibrations ou à des champs électromagnétiques importants. Les produits chimiques doivent être conservés à l'écart des câbles, des protections en plastique et de tout autre composant sensible à la corrosion.</p>

1 Introduction

1.1 À propos de ce manuel

Ce manuel d'installation contient des information)s sur l'installation de la balance, ainsi que toutes les exigences associées à une utilisation en toute sécurité du système. Pour plus d'informations sur ce produit, veuillez vous rendre sur www.mt.com/ind-paint-mixing-scale.

Ce manuel d'installation s'applique aux balances pour peinture intelligentes suivantes :

- RPA455x
- RPA455xx

1.2 Usage prévu

Les balances RPA455x ou RPA455xx sont destinées uniquement au pesage. Sauf autorisation écrite préalable de METTLER TOLEDO, tout autre type d'utilisation ou de fonctionnement en dehors des limites des caractéristiques techniques est considéré comme non conforme.

1.2.1 Domaines d'application

- Le modèle RPA455x est prévu pour une utilisation en zone dangereuse classée
 - EN / IEC : Zone 1
 - Amérique du Nord : Division 1 / Zone 1
- Le modèle RPA455xx est prévu pour une utilisation en zone dangereuse classée
 - EN / IEC : Zone 2

1.2.2 Conditions ambiantes

L'environnement de fonctionnement de cette balance doit respecter les exigences suivantes :

- Environnement intérieur.
- Température et humidité :
 - 0 °C à 40 °C (32 °F à 104 °F) à 10 % – 85 % d'humidité relative sans condensation
 - 0 °C à 35 °C (32 °F à 95 °F) à 10 % – 85 % d'humidité relative sans condensation (pour les modèles homologués en métrologie légale)

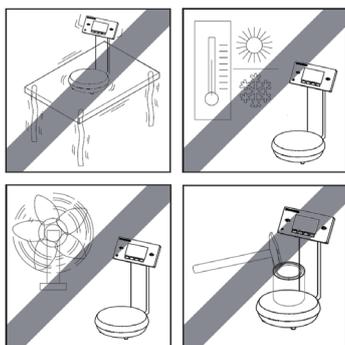
2 Installation

2.1 Déballage et contrôle

Vérifiez le contenu et inspectez la marchandise à la livraison. Si le colis est endommagé, vérifiez que le contenu n'est pas endommagé et, le cas échéant, envoyez une réclamation pour dommage au transporteur. Si le colis n'est pas endommagé, retirez la balance de son emballage de protection ; examinez la façon dont elle a été emballée et vérifiez qu'aucun composant n'est endommagé.

Si la balance doit être expédiée à nouveau, il convient d'utiliser l'emballage d'origine. La balance doit être correctement emballée afin de garantir la sécurité de son transport. Débranchez tous les câbles avant le transport.

2.2 Choix de l'emplacement



Pour des résultats de pesage précis, il convient de choisir avec soin l'emplacement idéal de la balance !

- Placez la balance sur une surface stable la plus horizontale possible qui n'est pas soumise à des vibrations.
- Évitez les variations importantes de température et toute exposition directe au soleil. Veillez à maintenir des conditions environnementales appropriées.
- Évitez les courants d'air (par exemple, de ventilateurs ou de climatiseurs).
- N'utilisez jamais de marteau pour fermer les pots de peinture sur le plateau de pesage.



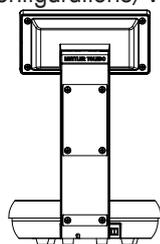
REMARQUE :

de la condensation provoquée par l'humidité peut se former à la surface d'appareils froids lorsqu'ils viennent d'une pièce nettement plus chaude.

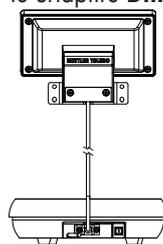
Débranchez la balance de l'alimentation et laissez-la s'acclimater pendant 2 heures environ avant de la rebrancher.

2.3 Configurations des balances

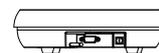
Les balances RPA455x et RPA455xx sont compatibles avec la configuration classique, le montage mural et l'installation de la base uniquement afin de s'adapter aux différentes possibilités d'installation sur le site du client. Pour connaître les dimensions de chacune des configurations, veuillez consulter le chapitre **Dimensions**.



Configuration classique



Configuration murale

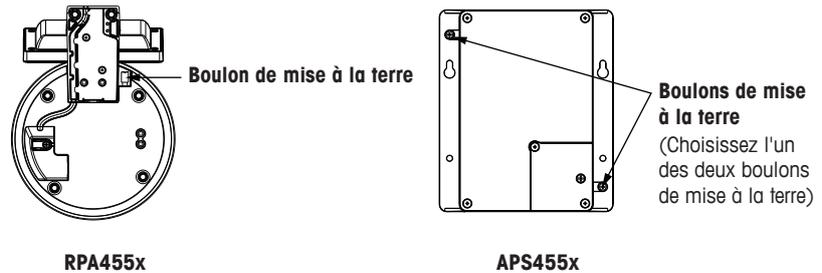


Conception avec seulement la base

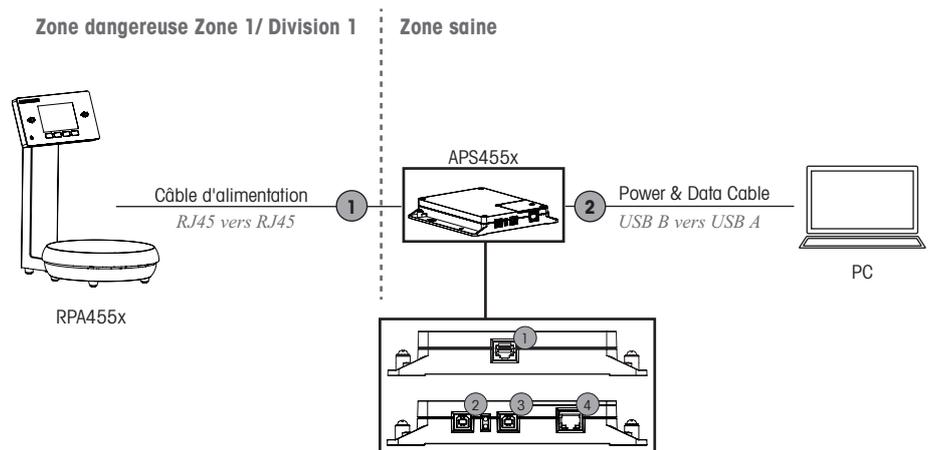
2.4 Installation d'une balance RPA455x dans une zone dangereuse classée zone 1/division 1

Le modèle RPA455x est conçu pour une utilisation en zone dangereuse classée Zone 1 / Division 1. Choisissez l'une des deux configurations électriques pour installer la balance RPA455x.

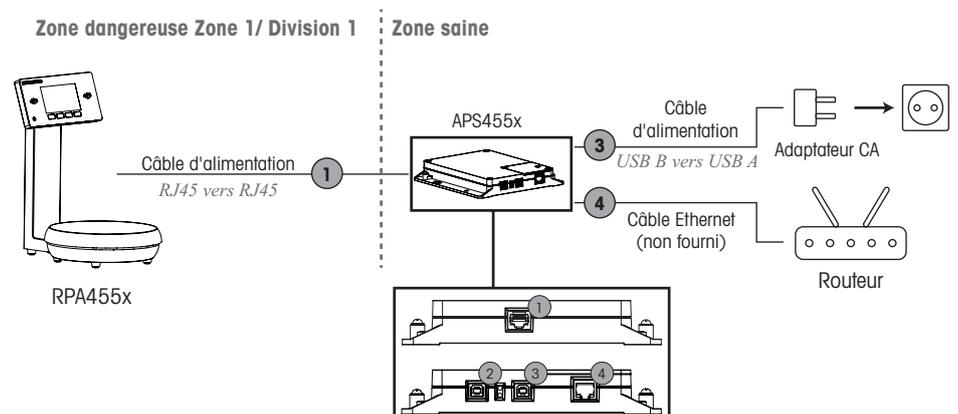
Veuillez noter que la balance RPA455x et l'APS455x doivent tous deux être mis à la terre.



Solution 1 : câblage de l'entrée d'alimentation et de communication RS232 via l'APS455x



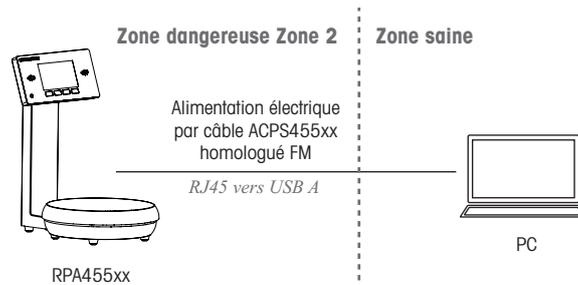
Solution 2 : câblage de l'entrée d'alimentation et de communication Ethernet via l'APS455x et l'adaptateur secteur



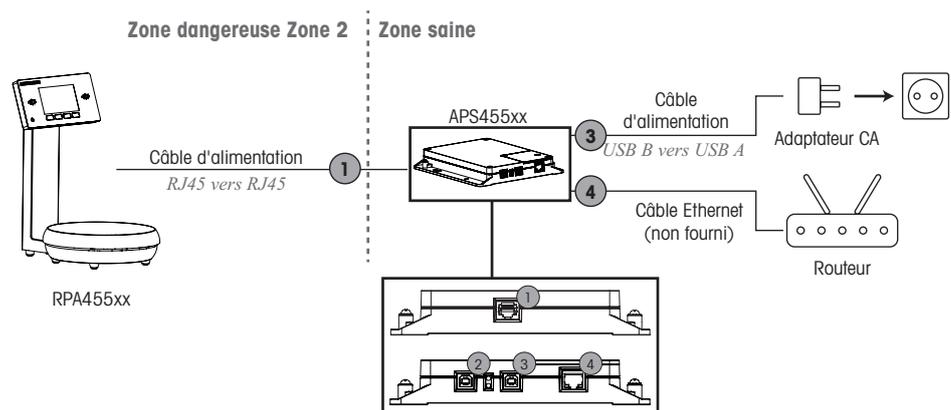
2.5 Installation de la balance RPA455xx en zone dangereuse classée Zone 2

Le modèle RPA455xx est conçu pour une utilisation en zone dangereuse classée Zone 2. Choisissez l'une des deux configurations électriques pour installer la balance RPA455xx.

Solution 1 : câblage de l'entrée d'alimentation et de communication RS232

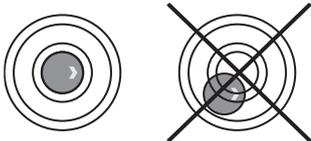


Solution 2 : câblage de l'entrée d'alimentation et de communication Ethernet via l'APS455xx et l'adaptateur secteur



2.6 Mise de niveau

Il convient que la balance soit installée parfaitement à l'horizontale afin de garantir des résultats stables et reproductibles. Mettez la balance de niveau à chaque fois que vous la déplacez.



Veillez noter que toutes les balances homologuées en métrologie légale sont fournies avec un niveau à bulle.

→ Tournez les pieds réglables jusqu'à ce que la bulle soit au centre de l'anneau.

2.7 Préchauffage



→ Préchauffez la balance pendant au moins 30 minutes lors du premier branchement du USB Power & Data Barrier.

▲ Cette opération permet à la balance d'atteindre la température de service requise et, par conséquent, d'offrir des résultats de pesage précis.

3 Caractéristiques techniques

Spécifications	Modèles non homologués en métrologie légale	Modèles homologués en métrologie légale
Portée	7500 g/999,95 g	Min. 5 g, Max. 7 500 g
Échelon de vérification e	Non applicable	1 g
Précision d'affichage	0,1 g/0,05 g	0,1 g
Modules de pesage	g, kg, oz, P (1 P =1/32 oz)	g
Conditions ambiantes d'utilisation	Utilisation à l'intérieur uniquement, 0 °C - 40 °C / 32 °F - 104 °F, à une humidité relative comprise entre 10 % et 85 % sans condensation	Utilisation à l'intérieur uniquement, 0 °C - 35 °C / 32 °F - 95 °F, à une humidité relative comprise entre 10 % et 85 % sans condensation
Application interne	<ul style="list-style-type: none"> • Calcul par facteur • Mélange sans formule • Mélange avec formule • Nouveau calcul (correction en cas d'excès) • Gestion des formules • Mode BBA242 	<ul style="list-style-type: none"> • Mélange sans formule • Mélange avec formule • Nouveau calcul (correction en cas d'excès) • Gestion des formules • Mode BBA242
Temps de stabilisation	Moins de 1 seconde	
Plage de tarage	-7 500 g	
Plage de réglage du zéro	± 750 g	
Plateau de pesage	Φ234 mm	
Écran/clavier	Écran tactile capacitif couleur TFT LCD	
Langue	Anglais, chinois, allemand, français, espagnol, portugais	
Indice de protection IP	IP40 conformément à l'EN 60529/IEC 60529	
Liaison de l'interface	USB et Ethernet en option (APS455x / APS455xx) ou USB (câble d'alimentation ACPS455xx)	
Alimentation	USB 2.0 ou supérieur, ou adaptateur secteur PSAL05R-050QL6	
Tension d'entrée I Puissance absorbée	5 VCC 5 W	
Stockage et transport	-10 °C – 60 °C, à une humidité relative comprise entre 5 % et 95 % sans condensation	
Catégorie de surtension	II	
Niveau de pollution	II	
Poids (net / brut)	5,4 kg / 6,5 kg (modèle avec 20 m de câble et de cordon)	

Instrucciones de seguridad

- Lea el manual de instalación concienzudamente antes de instalar la báscula.
- Dirijase siempre a este manual y guárdelo para usos futuros.

	⚠ ADVERTENCIA
	Asegúrese de que solo personal cualificado realice las comprobaciones, las pruebas y los ajustes que se llevan a cabo con el encendido. Si no se tienen en cuenta estas precauciones, se pueden producir daños personales.

	⚠ ADVERTENCIA
	Desconecte siempre la báscula del módulo USB Power & Data Barrier antes de realizar instalaciones, tareas de mantenimiento, limpiezas o arreglos.

	⚠ ADVERTENCIA
	Compruebe los cables del adaptador de CA y el módulo USB Power & Data Barrier de forma periódica. La báscula no se debe usar si el cable está dañado.

	⚠ ATENCIÓN
	Use la báscula con cuidado. Los golpes al plato de pesaje o la sobrecarga excesiva dañarán la báscula.

	⚠ ATENCIÓN
	Use únicamente los accesorios y periféricos recomendados.

	⚠ ATENCIÓN
	No abra la báscula. La garantía se anulará si ignora esta condición. Solo el personal autorizado puede abrir la báscula.

Notas de advertencia con respecto a la instalación

	⚠ ADVERTENCIA
	No use la báscula si su carcasa, el módulo USB Power & Data Barrier o el adaptador de CA que incluye todas las conexiones están dañados. Desconecte el dispositivo dañado de la fuente de alimentación.

	⚠ ATENCIÓN
	El instrumento solo debe usarse en interiores. Evite producir electricidad estática en piezas de vidrio o plástico. Limpie los dispositivos únicamente como se indica en las instrucciones de limpieza y desconéctelos de la alimentación antes de hacerlo.

	⚠ ATENCIÓN
	<p>No toque la superficie de la pantalla táctil con objetos afilados, puntiagudos, duros o recios. Tenga cuidado con el panel de vidrio; si está dañado, desconecte el dispositivo de la alimentación inmediatamente.</p>
	⚠ ATENCIÓN
	<p>Coloque los cables en un lugar donde no puedan sufrir daños ocasionados por bordes afilados y en el que no puedan provocar tropiezos.</p>
	⚠ ATENCIÓN
	<p>El dispositivo cumple con los requisitos de puntuación de protección IP40. Maneje este dispositivo de acuerdo con su puntuación de protección IP y proteja adecuadamente el entorno en el que se use.</p>
	⚠ ATENCIÓN
	<p>Use solo accesorios suministrados por METTLER TOLEDO. Asegúrese de que la capacidad de voltaje indicada en el adaptador de CA es idéntica a la de la red eléctrica local. Resulta esencial cumplir con las normativas nacionales relacionadas con las conexiones de toma a tierra.</p>
	⚠ ATENCIÓN
	<p>No exponga el dispositivo a temperaturas extremas, vapores químicos agresivos, golpes, humedad, vibraciones o campos electromagnéticos potentes. Los cables, las fundas de plástico y otros componentes propensos a la corrosión deben mantenerse alejados de los compuestos químicos.</p>

1 Introducción

1.1 Acerca de este manual

Este manual de instalación contiene información acerca de la instalación del sistema y todos los requisitos necesarios para su uso seguro. Para obtener más información acerca de este producto, visite www.mt.com/ind-paint-mixing-scale.

Este manual de instalación se aplica a las siguientes básculas de pintura inteligentes:

- RPA455x
- RPA455xx

1.2 Uso previsto

Use los modelos RPA455x o RPA455xx únicamente para realizar pesajes. Cualquier otro tipo de uso y manejo que difieran de los límites establecidos en las especificaciones técnicas sin el consentimiento escrito por parte de METTLER TOLEDO se considera inadecuado.

1.2.1 Áreas de aplicación

- RPA455x para uso en zonas peligrosas clasificada como
 - EN/CEI: Zona 1
 - Norteamérica: División 1/Zona 1
- RPA455xx para uso en zonas peligrosas clasificada como
 - EN/CEI: Zona 2

1.2.2 Condiciones ambientales

El entorno en el que se vaya a usar la báscula debe cumplir los siguientes requisitos:

- entorno interior.
- Temperatura y humedad:
 - 0 °C a 40 °C (32 °F a 104 °F), a una humedad relativa del 10 % al 85 % sin condensación
 - 0 °C a 35 °C (32 °F a 95 °F), a una humedad relativa del 10 % al 85 % sin condensación

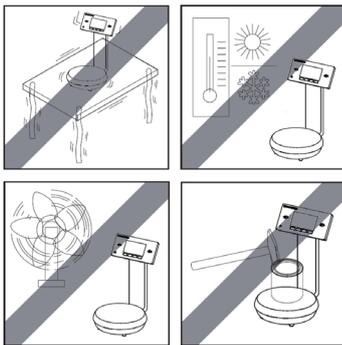
2 Instalación

2.1 Desembalaje e inspección

Compruebe el contenido e inspeccione el suministro inmediatamente después de la entrega. En caso de que el contenedor de envío estuviera dañado a la entrega, compruebe si el contenido presenta algún desperfecto y, dado el caso, envíe una reclamación por daños a la empresa de transportes. Si el contenedor no está dañado, extraiga el dispositivo del embalaje protector prestando atención a cómo está embalado e inspeccione todos los componentes por si presentaran daños.

Si el dispositivo tuviera que enviarse de nuevo, es debería usar el embalaje original. El dispositivo debe embalarse correctamente a fin de asegurar un transporte seguro. Desenchufe todos los cables antes de transportarlos.

2.2 Selección de la ubicación



Para obtener resultados de pesaje exactos, debe tener cuidado a la hora de seleccionar la ubicación óptima para la báscula.

- Coloque la báscula en una superficie estable libre de vibraciones y en la posición más horizontal posible.
- Evite la fluctuación excesiva de temperatura y la luz del sol directa. Asegúrese de que las condiciones ambientales son las adecuadas.
- Evite corrientes (por ejemplo, desde ventiladores hasta aire acondicionado).
- No use nunca un martillo para cerrar latas de pinturas en el plato de pesaje.



NOTA:

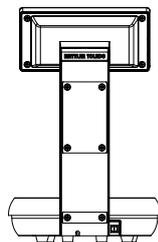
Se puede formar condensación de humedad en las superficies de un dispositivo frío cuando se coloca en una zona considerablemente más cálida.

Desconecte el dispositivo de la alimentación y permita que se aclimate durante dos horas aproximadamente antes de volver a conectarlo a la alimentación.

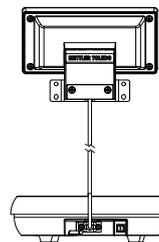
2.3 Configuración la báscula

RPA455x y RPA455xx son compatibles con configuraciones estándar, de montaje en pared y únicamente con base de báscula para satisfacer diferentes requisitos de instalación en la ubicación del cliente. Para obtener las dimensiones de cada configuración, consulte

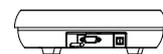
Dimensions.



Configuración estándar



Configuración de montaje en pared

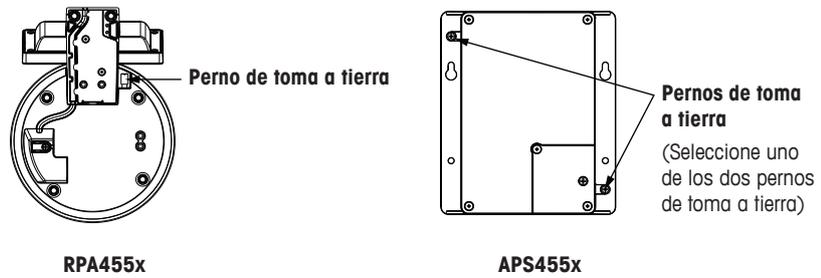


Configuración únicamente con base de báscula

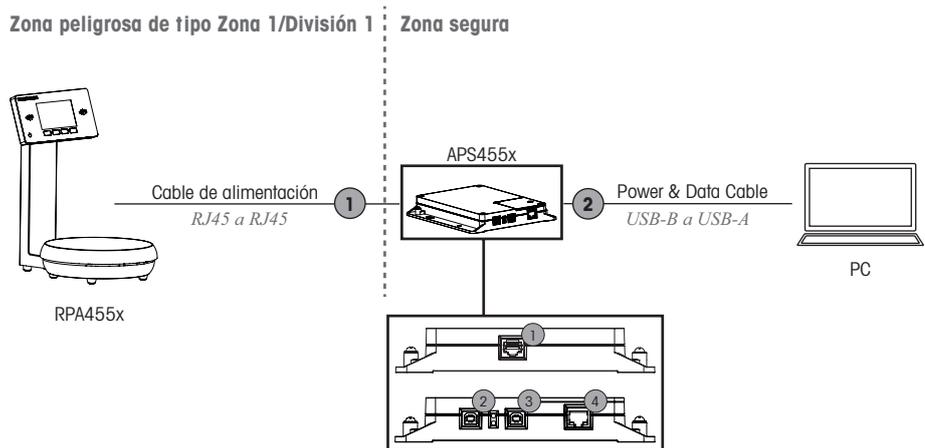
2.4 Instalación de RPA455x en una zona peligrosa Zona 1/División 1.

RPA455x se ha diseñado para su uso en la zona peligrosa Zona 1/División 1. Seleccione una de las siguientes soluciones de cableado para instalar RPA455x.

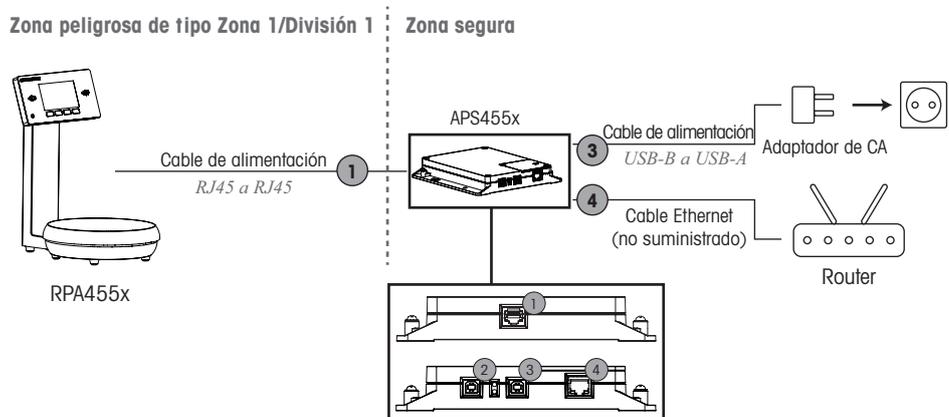
Tenga en cuenta que tanto RPA455x como APS455x deben tener toma a tierra.



Solución 1: Cableado de entrada de alimentación y comunicaciones RS232 mediante APS455x



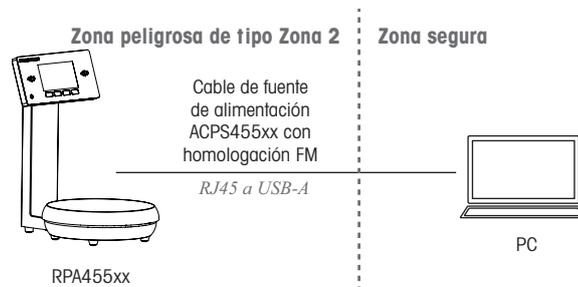
Solución 2: Cableado de entrada de alimentación y comunicaciones Ethernet mediante APS455x y un adaptador de CA



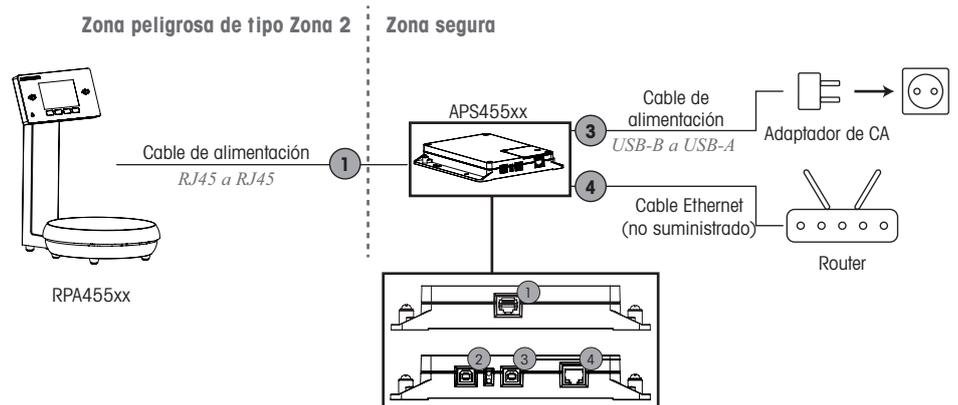
2.5 Instalación de RPA455xx en una zona peligrosa Zona 2

RPA455xx se ha diseñado para su uso en la zona peligrosa Zona 2. Seleccione una de las siguientes soluciones de cableado para instalar RPA455xx.

Solución 1: Cableado de entrada de alimentación y comunicaciones RS232

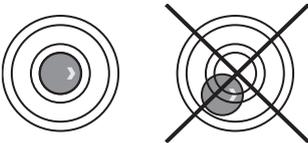


Solución 2: Cableado de entrada de alimentación y comunicaciones Ethernet mediante APS455xx y un adaptador de CA



2.6 Nivelación

La báscula debe colocarse en una perfecta posición horizontal para obtener resultados de pesaje uniformes y reproducibles. Vuelva a nivelar la báscula cada vez que se cambie la ubicación.



Tenga en cuenta que todas las básculas con homologación metrológica proporcionan nivelación con burbuja.

→ Gire el pie ajustable hasta que la burbuja de nivel se encuentre entre las marcas cilíndricas.

2.7 Calentamiento



→ Deje que la báscula se caliente durante al menos 30 minutos después de la conexión inicial al módulo USB Power & Data Barrier.

▲ Al hacerlo, la báscula puede alcanzar la temperatura de funcionamiento requerida y, de este modo, proporcionar resultados de pesaje exactos.

3 Datos técnicos

Especificaciones.	Modelos sin homologación metrológica	Modelos con homologación metrológica
Capacidad	7500 g/999,95 g	Mín. 5 g, Máx. 7500 g
Intervalo de verificación e	No aplicable	1 g
Legibilidad	0,1 g/0,05 g	0,1 g
Unidades de pesaje	g, kg, oz, P (1 P =1/32 oz)	g
Condiciones de funcionamiento ambientales	Únicamente para uso en interiores, 0 °C-40 °C/32 °F-104 °F, a una humedad relativa de entre el 10 % y el 85 % sin condensación	Únicamente para uso en interiores, 0 °C-35 °C/32 °F-95 °F, a una humedad relativa de entre el 10 % y el 85 % sin condensación
Aplicación interna	<ul style="list-style-type: none"> • Cálculo por factor • Mezclas sin fórmulas • Mezclas con fórmulas • Recálculo posterior (corrección del vertido excesivo) • Gestión de fórmulas • Modo BBA242 	<ul style="list-style-type: none"> • Mezclas sin fórmulas • Mezclas con fórmulas • Recálculo posterior (corrección del vertido excesivo) • Gestión de fórmulas • Modo BBA242
Tiempo de estabilización	Menos de 1 segundo	
Rango de tara	-7500 g	
Rango cero activado	±750 g	
Plato de pesaje	∅234 mm	
Dispositivo indicador/ Teclado	Pantalla táctil LCD capacitiva con TFT a color	
Idioma	Inglés, chino, alemán, francés, español, portugués	
Protección IP	IP40 de acuerdo con las normas EN 60529/CEI 60529	
Conexión de interfaz	USB y Ethernet opcionales (APS455x / APS455xx) USB (fuente de alimentación por cable ACPS455xx)	
Fuente de alimentación	USB 2.0 o superior, o un adaptador de CA PSIAI05R-050QL6	
Tensión de entrada Consumo de alimentación	5 V CC 5 W	
Almacenamiento y envíos	De -10 °C a 60 °C a una humedad relativa de entre el 5 % y el 95 % sin condensación	
Categoría de sobretensión	II	
Grado de contaminación	II	
Peso (neto/bruto)	5,4 kg/6,5 kg (modelo con barrera y cable de 20 m)	

Instruções de Segurança

- Leia com atenção o manual de instalação antes de instalar a balança.
- Observe rigorosamente este manual e guarde-o para uso futuro.

	⚠ ATENÇÃO
	Permita que somente pessoal qualificado faça a verificação, testes e ajustes a serem realizados com o equipamento ligado. A não observação dessas precauções pode resultar em lesão corporal.

	⚠ ATENÇÃO
	Sempre desconecte a balança do USB Power & Data Barrier antes de instalar, operar, limpar ou realizar manutenção.

	⚠ ATENÇÃO
	Verifique o cabo do adaptador de CA e do USB Power & Data Barrier regularmente. A balança não deve ser utilizada quando o cabo estiver danificado.

	⚠ CUIDADO
	Manuseie a balança com CUIDADO. Bater no prato de pesagem ou sobrecarregá-lo danificará a balança.

	⚠ CUIDADO
	Utilize apenas acessórios e periféricos recomendados.

	⚠ CUIDADO
	Não abra a balança. A garantia será anulada se essa disposição for ignorada. A balança só pode ser aberta por pessoal autorizado.

Notas de Advertência Sobre a Instalação

	⚠ ATENÇÃO
	Não utilize a balança se o gabinete, o USB Power & Data Barrier e o adaptador de CA com todas as conexões, estiverem danificados. Desconecte o dispositivo danificado.

	⚠ CUIDADO
	O sistema só pode ser utilizado em ambientes internos. Evite gerar eletricidade estática em peças de vidro e plástico. Limpe os dispositivos apenas conforme estipulado nas instruções de limpeza e desligue-os antes.

	<p style="text-align: center;">⚠ CUIDADO</p> <p>Não toque na superfície da tela touchscreen com objetos afiados, pontiagudos, ásperos ou duros. Tenha CUIDADO com o painel de vidro; caso esteja danificado, desconecte o dispositivo imediatamente.</p>
	<p style="text-align: center;">⚠ CUIDADO</p> <p>Coloque os cabos em local onde eles não serão danificados por bordas afiadas ou que represente risco de alguém tropeçar.</p>
	<p style="text-align: center;">⚠ CUIDADO</p> <p>O dispositivo atende aos requisitos de classificação de proteção IP40. Manuseie este dispositivo de acordo com sua classe de proteção IP e proteja adequadamente o ambiente onde o dispositivo opera.</p>
	<p style="text-align: center;">⚠ CUIDADO</p> <p>Utilize apenas acessórios fornecidos pela METTLER TOLEDO. Certifique-se de que a classificação de tensão impressa no adaptador de CA seja idêntica à tensão da rede local. É essencial cumprir os regulamentos nacionais relativos às conexões de aterramento.</p>
	<p style="text-align: center;">⚠ CUIDADO</p> <p>Não exponha o dispositivo a temperaturas extremas, vapores químicos agressivos, choques, umidade, vibrações ou campos eletromagnéticos fortes. Os produtos químicos devem ser mantidos longe de cabos, tampas plásticas e outros componentes propensos à corrosão.</p>

1 Introdução

1.1 Sobre Este Manual

Este manual de instalação contém informações sobre a instalação e todos os requisitos necessários para uma utilização segura do sistema. Para obter mais informações sobre este produto, visite www.mt.com/ind-paint-mixing-scale.

Este manual de instalação aplica-se às seguintes balanças inteligentes para tinta:

- RPA455x
- RPA455xx

1.2 Uso Pretendido

Utilize a RPA455x ou a RPA455xx somente para pesagem. Qualquer outro tipo de uso e operação além dos limites das especificações técnicas sem o consentimento por escrito da METTLER TOLEDO é considerado como não pretendido.

1.2.1 Áreas de Aplicação

- A RPA455x destina-se à utilização em áreas perigosas classificadas como
EN/IEC: Zona 1
América do Norte: Divisão 1/Zona 1
- A RPA455xx destina-se à utilização em áreas perigosas classificadas como
EN/IEC: Zona 2

1.2.2 Condições Ambientais

O ambiente onde essa balança é operada deve atender aos seguintes requisitos:

- Ambiente interno.
- Temperaturas e umidade:
 - 0 °C a 40 °C (32 °F a 104 °F), 10% a 85% de umidade relativa, sem condensação
 - 0 °C a 35 °C (32 °F a 95 °F), 10% a 85% de umidade relativa, sem condensação (para modelos com aprovação metrológica)

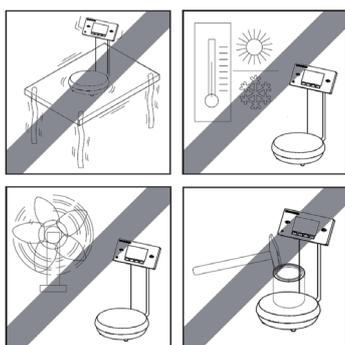
2 Instalação

2.1 Desembalagem e Inspeção

Verifique o conteúdo e inspecione o suprimento imediatamente após a entrega. Se o recipiente de transporte estiver danificado na chegada, verifique se o conteúdo apresenta danos e, se necessário, envie uma reclamação de danos à agência de transporte. Se o recipiente não estiver danificado, remova o dispositivo da embalagem protetora; observe como ele foi embalado e verifique se há danos em algum componente.

Se o dispositivo precisar ser enviado novamente, a embalagem original deverá ser reutilizada. O dispositivo deve ser embalado corretamente para garantir um transporte seguro. Desconecte todos os cabos antes de transportar.

2.2 Escolhido Local



Para obter resultados de pesagem precisos, deve-se ter CUIDADO para escolher o local ideal para a balança!

- Coloque a balança sobre uma superfície estável, sem vibrações e o mais horizontal possível.
- Evite temperaturas excessivamente oscilantes e luz solar direta. Garanta condições ambientais corretas.
- Evite correntes de ar (por exemplo, de ventiladores ou ar condicionado).
- Nunca utilize um martelo para fechar latas de tinta no prato de pesagem.



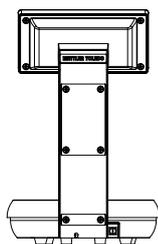
OBSERVAÇÃO:

Pode-se formar condensação da umidade nas superfícies de um dispositivo frio quando ele for colocado em uma área significativamente mais quente.

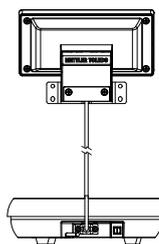
Desconecte o dispositivo e deixe-o aclimatar por aproximadamente 2 horas antes de reconectá-lo.

2.3 Configurações da balança

A RPA455x e a RPA455xx suportam configurações padrão, de montagem em parede e somente na base para atender a diferentes requisitos de instalação no local do cliente. Para obter as dimensões de cada configuração, vá para **Dimensions**.



Configuração padrão



Configuração de montagem na parede

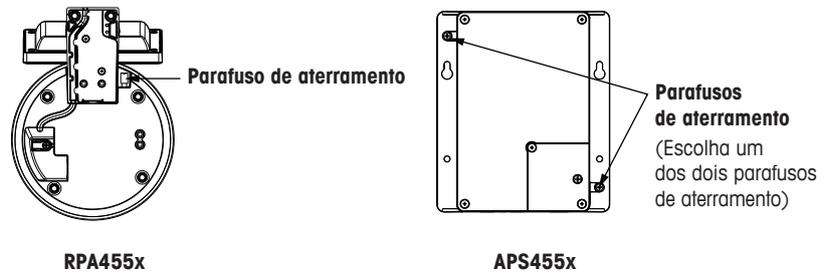


Configuração somente de base

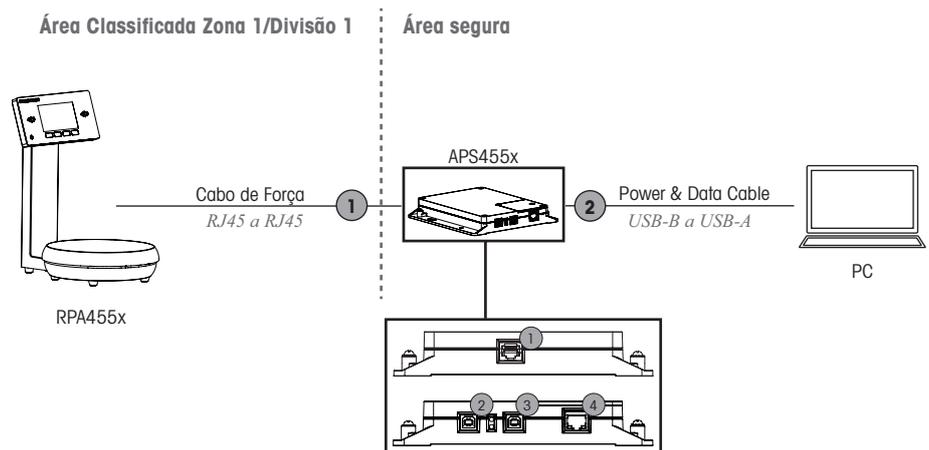
2.4 Instalação da RPA455x na Área Classificada Zona 1/Divisão 1

A RPA455x foi projetada para ser utilizada na Área Classificada Zona 1/Divisão 1. Escolha uma das duas soluções de fiação a seguir para instalar a RPA455x.

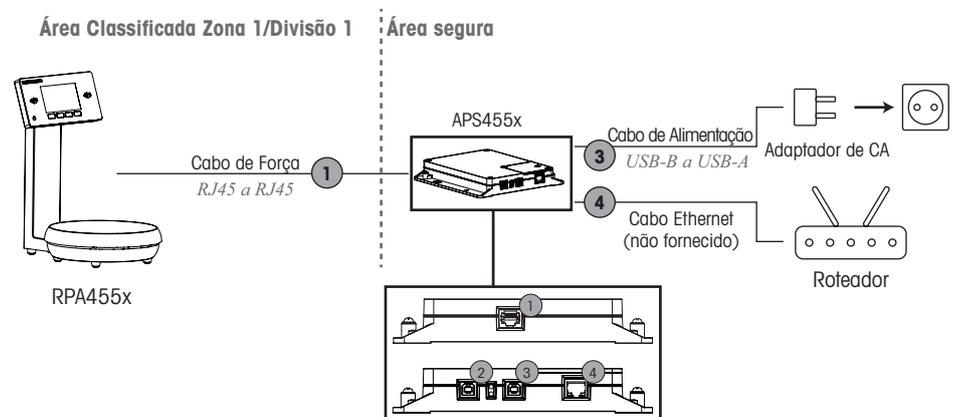
Observe que ambas RPA455x e APS455x devem estar aterradas.



Solução 1: fiação para entrada de energia e comunicações RS232 através de APS455x



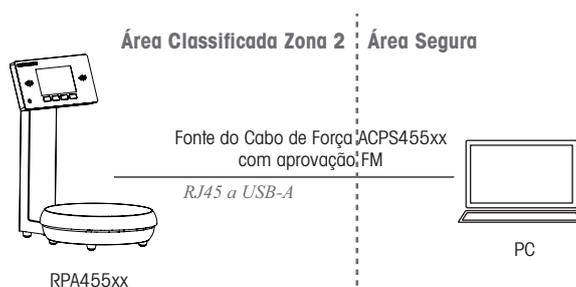
Solução 2: fiação para entrada de energia e comunicações Ethernet através de APS455x e adaptador de CA



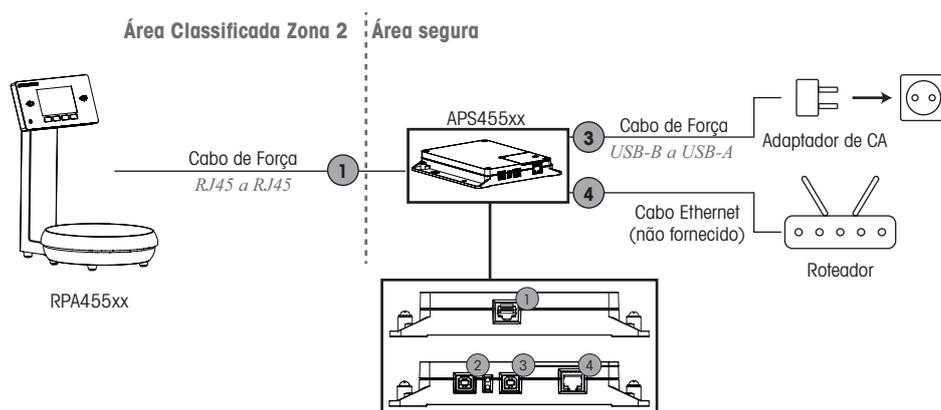
2.5 Instalando RPA455xx na Área Classificada Zona 2

A RPA455xx foi projetada para ser utilizada na Área Classificada Zona 2. Escolha uma das duas soluções de fiação a seguir para instalar a RPA455xx.

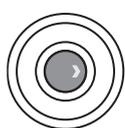
Solução 1: fiação para entrada de energia e comunicações RS232



Solução 2: fiação para entrada de energia e comunicações Ethernet através de APS455xx e adaptador CA



2.6 Nivelamento



A balança deve estar perfeitamente nivelada para garantir resultados de pesagem consistentes e reproduzíveis. Renivele a balança cada vez que seu local for alterado.

Observe se todas as balanças com aprovação metrológica estão fornecendo uma bolha de nivelamento.

→ Gire ospés ajustáveis até que a bolha de nível esteja dentro da marcação do anel.

2.7 Aquecendo



→ Aqueça a balança por pelo menos 30 minutos após a conexão inicial ao USB Power & Data Barrier.

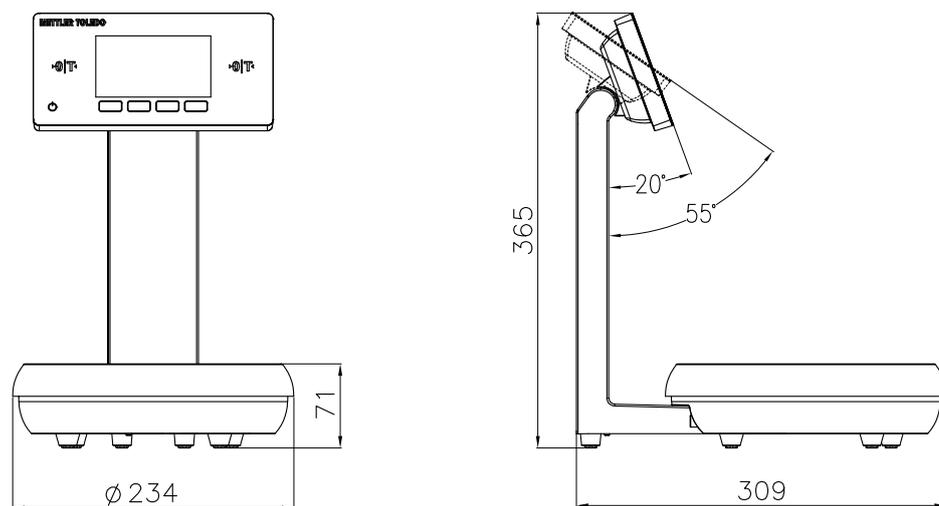
▲ Isso permite que a balança alcance a temperatura de operação necessária e, portanto, forneça resultados precisos de pesagem.

3 Dados Técnicos

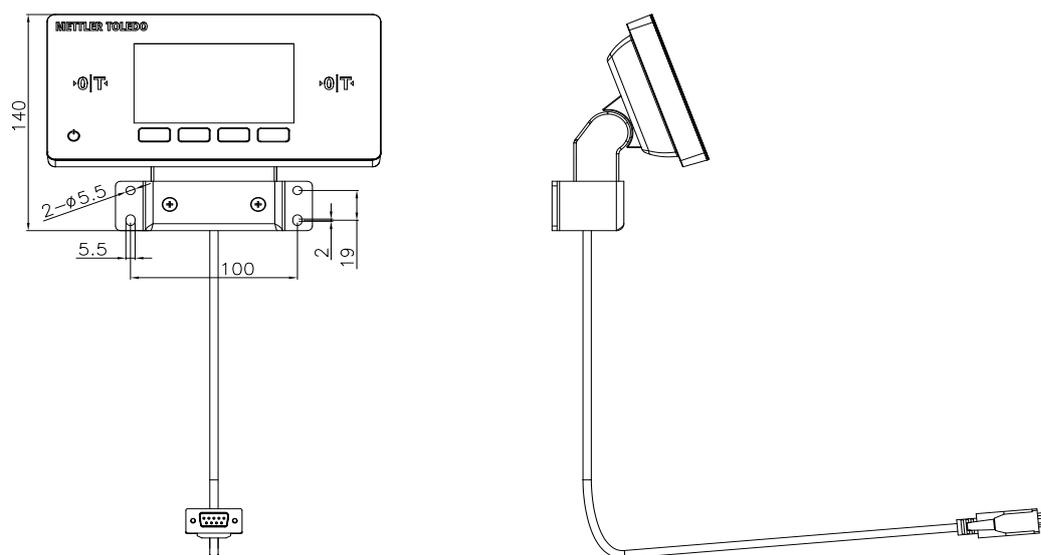
Especificações	Modelos não aprovados pela metrologia	Modelos com aprovação metrológica
Capacidade	7.500 g/999,95 g	Mínimo de 5 g, máximo de 7.500 g
Intervalo de verificação e	Não se aplica	1 g
Resolução	0,1 g/0,05 g	0,1 g
Unidades de pesagem	g, kg, onças, P (1 P =1/32 onças)	g
Condições operacionais do ambiente	Para utilização somente em ambientes internos 0°C - 40°C / 32°F - 104°F, à umidade relativa de 10% a 85%, sem condensação	Para utilização somente em ambientes internos 0°C - 35°C / 32°F - 95°F, à umidade relativa de 10% a 85%, sem condensação
Aplicação Interna	<ul style="list-style-type: none"> • Cálculo por Fator • Mistura sem Fórmula • Mistura com Fórmula • Recálculo (correção de excesso de fluidez) • Gerenciamento de Fórmulas • Modo BBA242 	<ul style="list-style-type: none"> • Mistura sem Fórmula • Mistura com Fórmula • Recálculo (correção de excesso de fluidez) • Gerenciamento de Fórmulas • Modo BBA242
Tempo de estabilização	Menos de 1 segundo	
Varição de tara	-7.500 g	
Ligue a faixa zero	± 750 g	
Prato de pesagem	Φ234 mm	
Display/Teclado	Tela Touchscreen Colorida Capacitiva de TFT LCD	
Idioma	Inglês, chinês, alemão, francês, espanhol, português	
Proteção IP	IP40 em conformidade com EN 60529/IEC 60529	
Conexão da interface	USB e Ethernet opcional (APS455x/APS455xx) ou USB (fonte de alimentação por cabo ACPS455xx)	
Fonte de alimentação	USB 2.0 ou superior, ou adaptador CA PSAL05R-050QL6	
Tensão de entrada Consumo de energia	5 VCC 5 W	
Armazenamento e transporte	-10 °C - 60 °C, com umidade relativa de 5% a 95% sem condensação	
Categoria de sobretensão	II	
Grau de poluição	II	
Peso (líquido/bruto)	5,4 kg/6,5 kg (modelo com cabo e barreira de 20 m)	

Dimensions

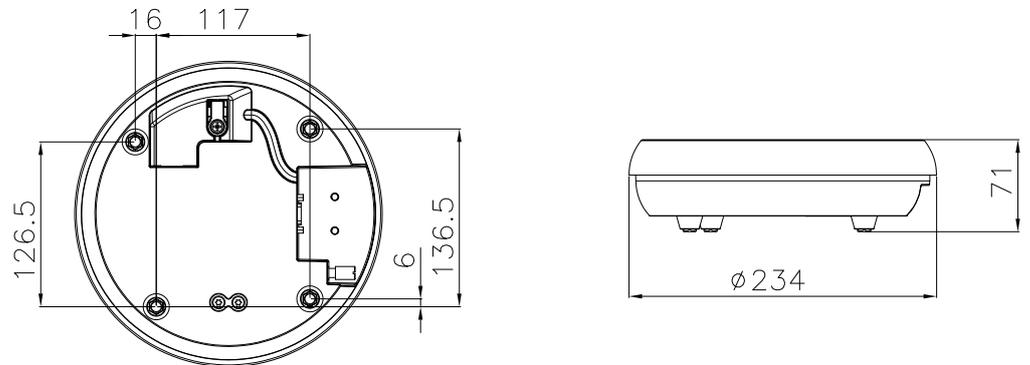
Dimensions for Standard Scale Configuration



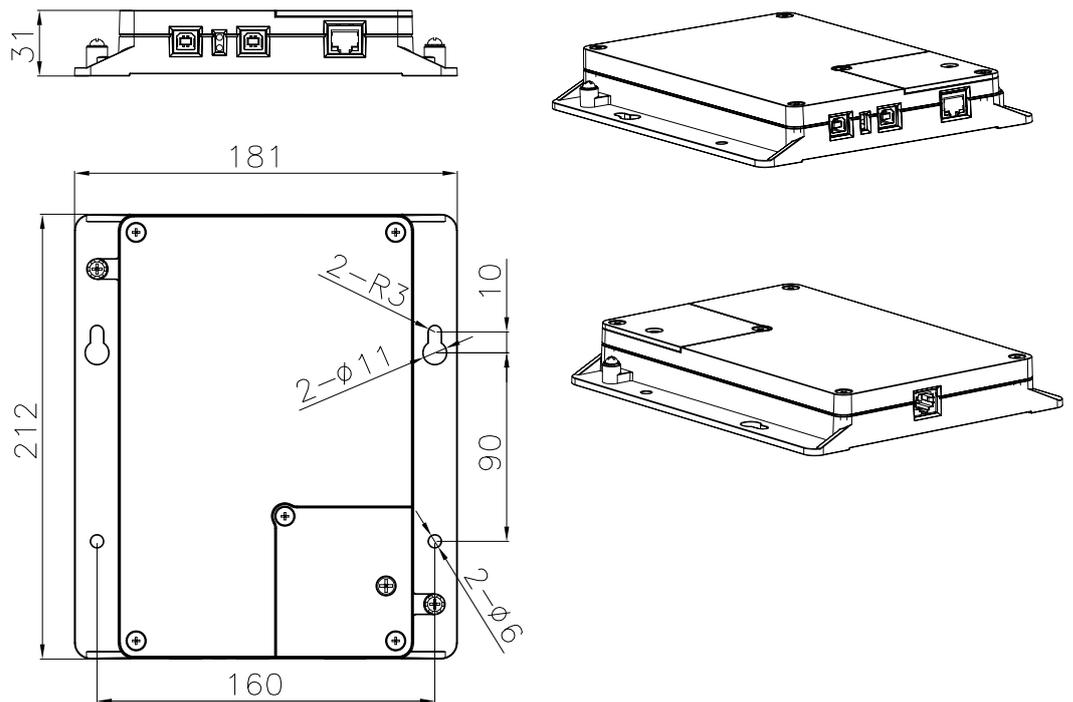
Dimensions for Wall-Mount Configuration



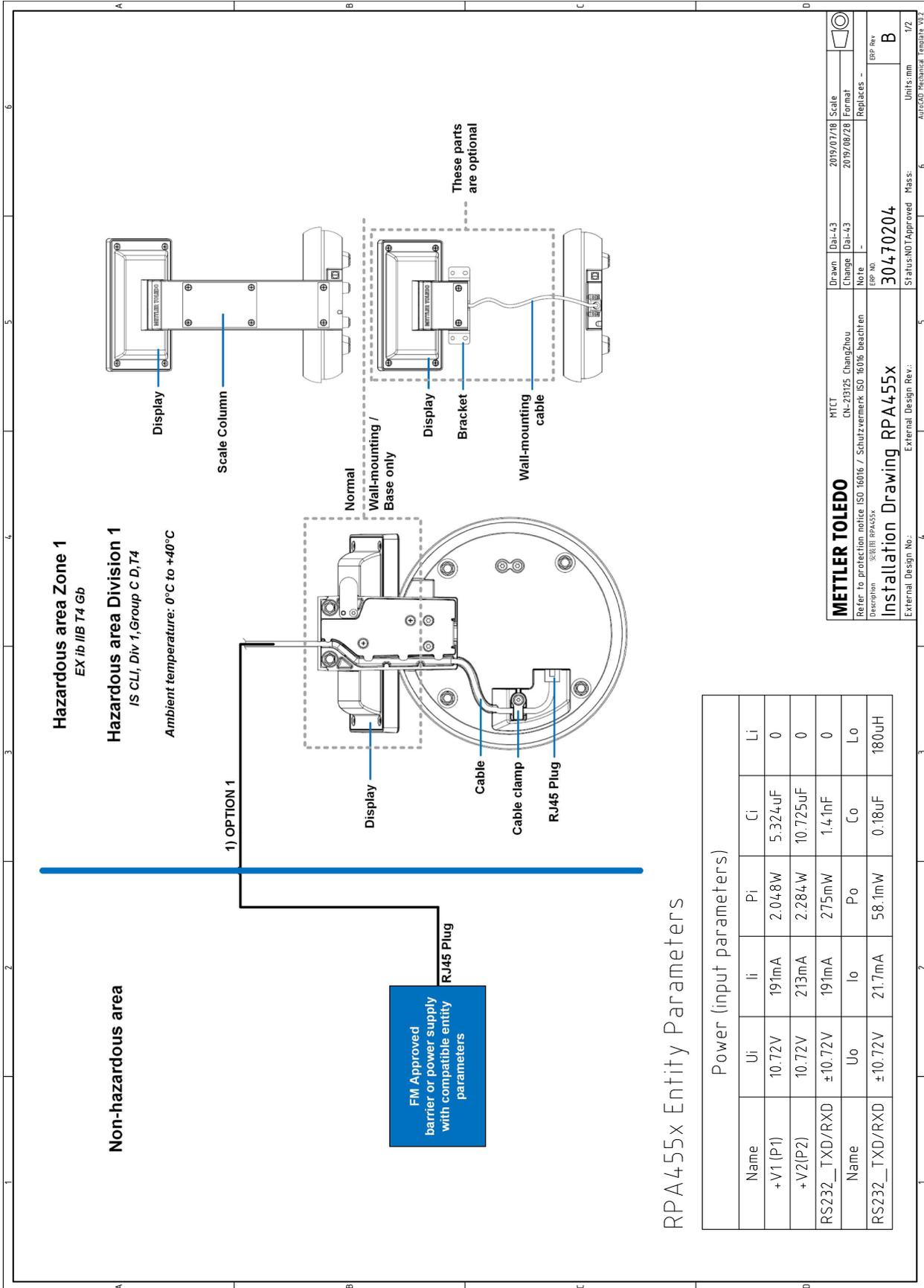
Dimensions for Scale Base-Only Configuration



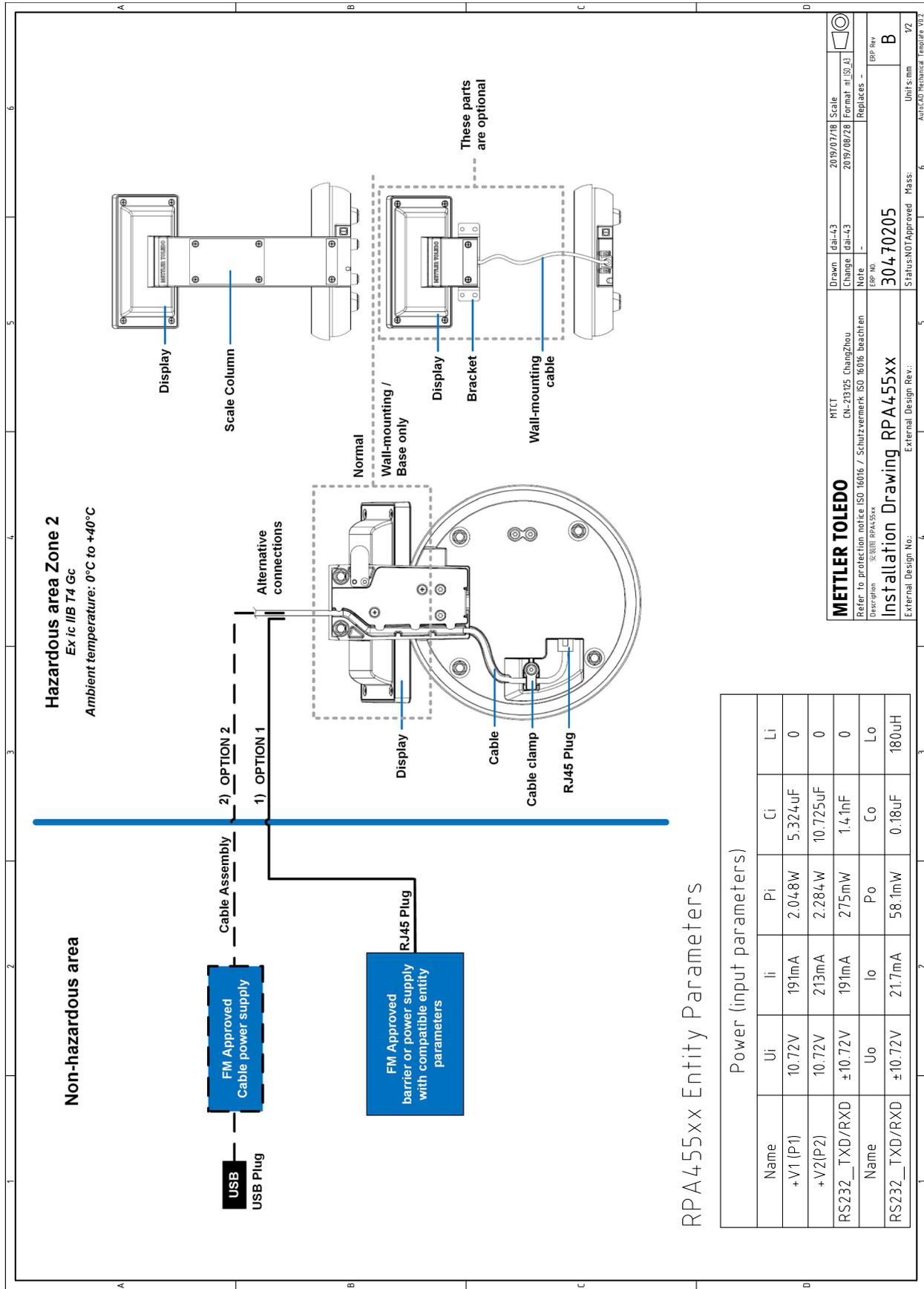
Dimension of USB Power & Data Barrier



Control Drawings



A	B	C	D	1	2	3	4	5	6																																										
<p>These safety instructions apply to the installation, operation, maintenance and repair of the equipment.</p> <ol style="list-style-type: none"> OPTION 1. Only the Mettler-Toledo intrinsically safe cable 304.70188 (20 Meters) or 304.70195 (10 Meters) shall be used for connection to the intrinsically safe outputs of the associated apparatus. The enclosure contains aluminum and is considered to present a potential risk of ignition by impact or friction. Care must be taken during installation and use to prevent impact or friction. Parts of the enclosure are constructed of plastic. The risk of electrostatic discharge shall be minimized at installation, following the direction given in the instruction manual. The Paint Mixing Scale does not withstand a 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation. No revision to drawing without prior FM Approval. The Associated Apparatus must be FM Approved. Control equipment connected to Associated Apparatus must not use or generate more than 250 Vrms or Vdc. Associated apparatus manufacturer's installation drawing must be followed when installing this equipment. The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus when the following is true: $V_{max} \text{ or } U_i \geq V_{oc}, V_t \text{ or } U_o;$ $I_{max} \text{ or } I_i \geq I_{sc}, I_f \text{ or } I_o;$ $P_{max} \text{ or } P_i \geq P_o;$ $C_a \geq C_i + C_{cable};$ $L_a \geq L_i + L_{cable}.$ Resistance between Intrinsically Safe Ground and earth ground must be less than 1.0 Ohm. Installation should be in accordance with ANSI/ISA RP12.06.01 "Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations" and the National Electrical Code (ANSI/NFPA 70), or in accordance with European Standards EN 60079-14 (Explosive atmospheres - Part 14: Electrical installations design, selection and erection), or in accordance with the Canadian Electrical Code, Section 18. WARNING - Substitution of components may impair Intrinsic Safety. WARNING - To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing. WARNING - Potential Electrostatic Charging Hazard - The enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned only with a damp cloth. WARNING - The apparatus enclosure contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction. 																																																			
A	B	C	D	1	2	3	4	5	6																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">METTLER TOLEDO</td> <td style="width: 10%;">MTCT</td> <td style="width: 10%;">Drawn</td> <td style="width: 10%;">Dai-43</td> <td style="width: 10%;">Scale</td> <td style="width: 10%;">2019/07/18</td> </tr> <tr> <td></td> <td>CN-21325 ChangZhou</td> <td>Change</td> <td>Dai-43</td> <td></td> <td>2019/08/28</td> </tr> <tr> <td></td> <td>Refer to protection notice ISO 16016 / Schutzvermerk ISO 16016 beachten</td> <td>Note</td> <td>-</td> <td>Replaces</td> <td>-</td> </tr> <tr> <td>Description</td> <td>安装用 RPA45x</td> <td>ERP NO.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>External Design No.</td> <td>Installation Drawing RPA455x</td> <td>ERP NO.</td> <td>304.70204</td> <td></td> <td>B</td> </tr> <tr> <td>External Design Rev.</td> <td></td> <td>Status</td> <td>NOT Approved</td> <td>Mass:</td> <td>Units:mm</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2/2</td> </tr> </table>										METTLER TOLEDO	MTCT	Drawn	Dai-43	Scale	2019/07/18		CN-21325 ChangZhou	Change	Dai-43		2019/08/28		Refer to protection notice ISO 16016 / Schutzvermerk ISO 16016 beachten	Note	-	Replaces	-	Description	安装用 RPA45x	ERP NO.				External Design No.	Installation Drawing RPA455x	ERP NO.	304.70204		B	External Design Rev.		Status	NOT Approved	Mass:	Units:mm						2/2
METTLER TOLEDO	MTCT	Drawn	Dai-43	Scale	2019/07/18																																														
	CN-21325 ChangZhou	Change	Dai-43		2019/08/28																																														
	Refer to protection notice ISO 16016 / Schutzvermerk ISO 16016 beachten	Note	-	Replaces	-																																														
Description	安装用 RPA45x	ERP NO.																																																	
External Design No.	Installation Drawing RPA455x	ERP NO.	304.70204		B																																														
External Design Rev.		Status	NOT Approved	Mass:	Units:mm																																														
					2/2																																														
A	B	C	D	1	2	3	4	5	6																																										



Hazardous area Zone 2
Ex ic IIB T4 Gc
 Ambient temperature: 0°C to +40°C

Non-hazardous area

FM Approved
 Cable power supply

FM Approved
 barrier or power supply
 with compatible entity
 parameters

Power (input parameters)					
Name	U _i	I _i	P _i	C _i	L _i
+V1 (P1)	10.72V	191mA	2.048W	5.324µF	0
+V2 (P2)	10.72V	213mA	2.284W	10.725µF	0
RS232_TXD/RXD	±10.72V	191mA	275mW	1.41nF	0
Name	U _o	I _o	P _o	C _o	L _o
RS232_TXD/RXD	±10.72V	21.7mA	58.1mW	0.18µF	180µH

RPA455xx Entity Parameters

METTLER TOLEDO
 Refer to protection notice ISO 16016 / Schutzvermerk ISO 16016 beachten
 Description: 304161 RPA455xx

Drawn: dai-43 2019/07/18 Scale
 Change: dai-43 2019/08/28 Format: ai ISO A3
 Note: - Replaces: -
 EDP No.: - EDP Rev.: -

Installation Drawing RPA455xx
 External Design Rev.: - Status: NOT Approved Mass: - Unit: mm

304.70205
 6 6

Approved Mechanical Replaces: WZ 92

These safety instructions apply to the installation, operation, maintenance and repair of the equipment.

1. OPTION 1: Only the Mettler-Toledo intrinsically safe cable 304.70188 (20 Meters) or 304.70195 (10 Meters) shall be used for connection to the intrinsically safe outputs of the associated apparatus.
2. OPTION 2: Only the Mettler-Toledo intrinsically safe cable power supply 304.70193 (10 Meters) or 304.70194 (3 Meters) shall be used for connection.
3. The enclosure contains aluminum and is considered to present a potential risk of ignition by impact or friction. Care must be taken during installation and use to prevent impact or friction.
4. Parts of the enclosure are constructed of plastic. The risk of electrostatic discharge shall be minimized at installation, following the direction given in the instruction manual.
5. The Paint Mixing Scale does not withstand a 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation.
6. No revision to drawing without prior FM Approval.
7. The Associated Apparatus must be FM Approved.
8. Control equipment connected to Associated Apparatus must not use or generate more than 250 Vrms or Vdc.
9. Associated apparatus manufacturer's installation drawing must be followed when installing this equipment.
10. The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus when the following is true:
 $V_{max} \text{ or } U_i \geq V_{oc}, V_f \text{ or } U_o;$
 $I_{max} \text{ or } I_i \geq I_{sc}, I_f \text{ or } I_o;$
 $P_{max} \text{ or } P_i \geq P_o;$
 $Ca \geq Ci + Ccable;$
 $La \geq Li + Lcable.$
11. Resistance between Intrinsically Safe Ground and earth ground must be less than 1.0 Ohm.
12. Installation should be in accordance with ANSI/ISA RP12.06.01 "Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations" and the National Electrical Code (ANSI/NFPA 70), or in accordance with European Standards EN 60079-14 (Explosive atmospheres - Part 14: Electrical installations design, selection and erection), or in accordance with the Canadian Electrical Code, Section 48.
13. WARNING - Substitution of components may impair Intrinsic Safety.
14. WARNING - To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.
15. WARNING - Potential Electrostatic Charging Hazard - The enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned only with a damp cloth.
16. WARNING - The apparatus enclosure contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

METTLER TOLEDO		Drawn	dai-4.3	2019/07/18	Scale	
Refer to protection notice ISO 16016 / Schutzvermerk ISO 16016 beachten		Change	dai-4.3	2019/08/28	Format	m_150_A1
Description: 名称: RPA455xx		Note	-		Replaces	-
Installation Drawing RPA455xx		ERP NO	304.70205		ERP Rev	B
External Design No.: External Design Rev.:		Status:NOT Approved	Mass:	Units:mm	2/2	
				AUTCAD Mechanical Template V102		

Label Drawings

For Base-only and Wall-Mount Configuration

RPA455xx Max 7500 g d=0.1 g $0^{\circ}\text{C} \leq \text{Ta} \leq +40^{\circ}\text{C}$ INT. SAFE Ex ic IIB T4 Gc	FM19ATEX0193X IECEX FMG 19.0030X	 II 3G	
For cautions, warnings and installation refer to the drawing 30470205.			

RPA455x Max 7500 g d=0.1 g $0^{\circ}\text{C} \leq \text{Ta} \leq +40^{\circ}\text{C}$ INT. SAFE	 APPROVED	IS CL I, Div 1, GP C, D T4 CL I, Zone 1, AEx / Ex ib IIB T4 Gb FM19US0153X FM19CA0082X	 II 2G Ex ib IIB T4 Gb FM19ATEX0192X IECEX FMG 19.0030X
For cautions, warnings and installation refer to the drawing 30470204.			

MODEL RPA CODE: mmmmmmmmmmmmmmmmm 5 VDC 1 A Temperature: dddddddddddddd cccccccccccccccccccccccc eeeeeeeeeeeeeeeeeeeeeeee	METTLER TOLEDO S/N SSSSSSSSSS Barcode <input type="text"/>		 Made in China
	Mettler-Toledo GmbH Im Langacher 44 CH-8606 Greifensee Switzerland www.mt.com	xxxxx	

For Standard Configuration

MODEL RPA CODE: mmmmmmmmmmmmmmmmm 5 VDC 1 A Temperature: dddddddddddddd cccccccccccccccccccccccc eeeeeeeeeeeeeeeeeeeeeeee	METTLER TOLEDO S/N SSSSSSSSSS Barcode <input type="text"/>		 Made in China
	Mettler-Toledo GmbH Im Langacher 44 CH-8606 Greifensee Switzerland www.mt.com	xxxxx	

RPA455x Max 7500 g d=0.1 g $0^{\circ}\text{C} \leq \text{Ta} \leq +40^{\circ}\text{C}$ INT. SAFE	 II 2G Ex ib IIB T4 Gb FM19ATEX0192X IECEX FMG 19.0030X	 0344
	 APPROVED	IS CL I, Div 1, GP C, D T4 CL I, Zone 1, AEx / Ex ib IIB T4 Gb FM19US0153X FM19CA0082X
WARNINGS Substitution of components may impair Intrinsic Safety. To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing. Electrostatic Charging Hazard - The enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth. The apparatus enclosure contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction. For additional cautions, warnings and installation refer to the drawing 30470204.		

RPA455xx Max 7500 g d=0.1 g $0^{\circ}\text{C} \leq \text{Ta} \leq +40^{\circ}\text{C}$ INT. SAFE Ex ic IIB T4 Gc FM19ATEX0193X IECEX FMG 19.0030X	 II 3G		
WARNINGS Substitution of components may impair Intrinsic Safety. To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing. Electrostatic Charging Hazard - The enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth. The apparatus enclosure contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction. For additional cautions, warnings and installation refer to the drawing 30470205.			

www.mt.com

For more information

METTLER-TOLEDO (Changzhou) Measurement Technology Ltd.

Add.: #111, West Taihu Road, XinBei District, Changzhou, Jiangsu, PRC.

Tel. +86 519 86642040

Fax +86 519 86641991

www.mt.com

Subject to technical changes

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