

**SERIES 10-101-IDEA-R1 (1 idlers station) - BELT SCALE**

**SERIES 10-101 IDEA R1 + MICRO-TECH BELT SCALES (No ATEX, No MID)**

Ramsey belt scale Series IDEA, by Thermo Scientific  
 Single weigh sensor designed to support n.1 idlers station, Thermo Ramsey's factory preassembled to be installed very easily on belt conveyors  
 For belts having width < 600 mm (for belts having width < 1.600 mm it is possible to combine n.2 sensors)  
 Weighing assembly composed by:

- n.1 module made by cast aluminium c/w stainless steel blades;
- n.1 steel cover, painted;
- n.1 high precision load cell (stainless steel, IP68, C3, 3 mt cable);
- each module is complete with n.1 mt of flexible conduit with PG9 galvanized steel cable glands;
- n.1 digital speed pick-up (SPU) model 60-12 (or equivalent);
- n.1 junction box model IT8041PD, polycarbonate, IP54, for cable connections of two (2) load cells and one (1) speed pick-up;
- n.1 microprocessor control unit, model Micro-Tech 9101F (p/n 136033), field mount IP66 (NEMA-4X) enclosure, 98÷230Vac, 50-60 Hz. Comes standard with (4) programmable relé out, (2) optoisolated digital in, (1) digital static out (FAIL or pulse), (1) Ethernet 100baseT, RJ45 interface, (1) serial out RS232/RS485 multidrop Modbus/RTU, Modbus/TCP, Ethernet/IP, (1) integrated USB, (3) programmable opto-insulated digital in and (4) optional expansion slots, available software languages: English, Spanish, German, Italian, French, Chinese simplified;



PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R1-BLANK-XXX	SINGLE IDEA "BLANK" MODULE (Load cell's capacity depends on the application)	BW up to 600 mm
-	IDLER MOUNTING SUPPORT NOT INCLUDED ("BLANK")	
6012C	SPU (6012C)	
IT8041PD	JB (IT8041PD)	
136033	MT 9101F (p/n 136033)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R1-BLANK-XXX	SINGLE IDEA "BLANK" MODULE (Load cell's capacity depends on the application)	BW up to 600 mm
508445	IDLER MOUNTING SUPPORT - "EU" STYLE (plate to weld idlers station's frame)	
6012C	SPU (6012C)	
IT8041PD	JB (IT8041PD)	
136033	MT 9101F (p/n 136033)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R1-BLANK-XXX	SINGLE IDEA "BLANK" MODULE (Customer to specify load cell's capacity)	BW up to 600 mm
508443	IDLER MOUNTING SUPPORT - "N.AM" STYLE (plate 209.6x222.3 mm with clamp)	
6012C	SPU (6012C)	
IT8041PD	JB (IT8041PD)	
136033	MT 9101F (p/n 136033)	

**SERIES 10-101 IDEA R1 + CK101 - COMPLETE SYSTEMS (No ATEX, No MID)**

Ramsey belt scale Series IDEA, by Thermo Scientific  
 Single weigh sensor designed to support n.1 idlers station, Thermo Ramsey's factory preassembled to be installed very easily on belt conveyors  
 For belts having width < 600 mm (for belts having width < 1.600 mm it is possible to combine n.2 sensors)  
 Weighing assembly composed by:

- n.1 module made by cast aluminium c/w stainless steel blades;
- n.1 steel cover, painted;
- n.1 high precision load cell (stainless steel, IP68, C3, 3 mt cable);
- each module is complete with n.1 mt of flexible conduit with PG9 galvanized steel cable glands;
- n.1 proximity speed pick-up (SPU) model 60-12P (or equivalent);
- n.1 junction box model IT8041PD, polycarbonate, IP54, for cable connections of two (2) load cells and one (1) speed pick-up;
- n.1 microprocessor control unit, model CK101F (p/n CK101FR240VAC), field mount IP65 (NEMA-4X) enclosure, 100÷230Vac. Comes standard with (4) programmable relé out, (1) optoisolated digital in, (1) digital static out (FAIL or pulse), (1) Ethernet 10baseT (Modbus TCP/IP), (1) independent opto-insulated digital in and (1) optional expansion slot;
- working temperature (°C): -10 ÷ +50 (not condensing).



PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R1-BLANK-XXX	SINGLE IDEA "BLANK" MODULE (Customer to specify load cell's capacity)	BW up to 600 mm
-	IDLER MOUNTING SUPPORT NOT INCLUDED ("BLANK")	
6012C	SPU (6012C)	
IT8041PD	JB (IT8041PD)	
CK101FR240VAC	INTEGRATOR (CK101FR240VAC)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R1-BLANK-XXX	SINGLE IDEA "BLANK" MODULE (Customer to specify load cell's capacity)	BW up to 600 mm
508445	IDLER MOUNTING SUPPORT - "EU" STYLE (plate to weld idlers station's frame)	
6012C	SPU (6012C)	
IT8041PD	JB (IT8041PD)	
CK101FR240VAC	INTEGRATOR (CK101FR240VAC)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R1-BLANK-XXX	SINGLE IDEA "BLANK" MODULE (Customer to specify load cell's capacity)	BW up to 600 mm
508443	IDLER MOUNTING SUPPORT - "N.AM" STYLE (plate 209.6x222.3 mm with clamp)	
6012C	SPU (6012C)	
IT8041PD	JB (IT8041PD)	
CK101FR240VAC	INTEGRATOR (CK101FR240VAC)	

**SERIES IDEA R1 - BASIC OPTIONS FOR MECHANICAL PART**

PART NO	MODEL NO.
148763	SS AISI 304 COVER FOR 10-101RZ
10-XX-SET/SPSSORH-MIX	SET OF SHIMS TO ALIGN THE BELT SCALE - Same as p/n 003141
ATEX 22 (consult Factory)	SYSTEM SUITABLE FOR INSTALLATION IN ATEX ZONE 22 (LC, JB, SPU and MT or CK -MET)
ATEX 21 (consult Factory)	SYSTEM SUITABLE FOR INSTALLATION IN ATEX ZONE 21 (LC, JB, SPU and MT-MET)

**SERIES 10-101RZ - PACKING**

Cardboard box for truck transport of n°1 BS 10-101-IDEA-R1

PART NO	MODEL NO.
PACKING 10-101RZ1-XXX	N.2 CARDBOARD BOXES - STD - 50x40x30(h) CM (each) - GROSS WEIGHT ~28 KG (total)
LARGE QUANTITIES	CONSULT FACTORY

**Belt loading requirements:**

1. for 10-101-RZ1: applications with loads <7 kg (16.5 lbs) or >115 kg (250 lbs) require factory review;
2. minimum net weight must be greater than 15% of load cell capacity;
3. maximum net weight must not exceed 85% of load cell capacity;
4. Weight includes weight of idler, belt and material;
5. maximum idler spacing 1.200 mm (~46").

**Note:**

1. 10-101-RZ1 requires a cross beam to support module and idler (excluded from Thermo Fisher Scientific supply).

**SERIES IDEA R1 - SUPPORT CROSS BEAM**

PART NO	MODEL NO.
10101RZ1LPSS-TRAV/FE/650	SUPPORT CROSS BEAM (Fe) TO FIX 10-101RZ1LPSS ON CONVEYORS HAVING BW < 650 MM
10101RZ1LPSS-TRAV/304/650	SUPPORT CROSS BEAM (Aisi 304) TO FIX 10-101RZ1LPSS ON CONVEYORS HAVING BW < 650 MM
10101RZ1LPSS-TRAV/316/650	SUPPORT CROSS BEAM (Aisi 316) TO FIX 10-101RZ1LPSS ON CONVEYORS HAVING BW < 650 MM

**SERIES 10-101-IDEA-R2 (1 idlers station) - BELT SCALE**

**SERIES 10-101 IDEA R2 + MICRO-TECH BELT SCALES (No ATEX, No MID)**

Ramsey belt scale Series IDEA, by Thermo Scientific

Dual weigh sensors designed to support n.1 idlers station, Thermo Ramsey's factory preassembled to be installed very easily on belt conveyors  
For belts having width < 1.600 mm (for belts having width < 600 mm it is possible to use n.1 single sensor)

Weighing assembly composed by:

- n.2 modules made by cast aluminium c/w stainless steel blades;
- n.2 steel covers, painted;
- n.2 high precision load cells (stainless steel, IP68, C3, 3 mt cable);
- n.2 lateral mounting supports (Left/Right) to fix the weighing modules to the stringers.
- each module is complete with n.1 mt of flexible conduit with P69 galvanized steel cable glands;
- n.1 digital speed pick-up (SPU) model 60-12 (or equivalent);
- n.1 junction box model IT8041PD, polycarbonate, IP54, for cable connections of two (2) load cells and one (1) speed pick-up;
- n.1 microprocessor control unit, model Micro-Tech 9101F (p/n 136033), field mount IP66 (NEMA-4X) enclosure, 98-230Vac, 50-60 Hz. Comes standard with (4) programmable relay out, (2) optoisolated digital in, (1) digital static out (FAIL or pulse), (1) Ethernet 100baseT, R45 interface, (1) serial out RS232/RS485 multidrop Modbus/RTU, Modbus/TCP, Ethernet/IP, (1) integrated USB, (3) programmable opto-insulated digital in and (4) optional expansion slots, available software languages: English, Spanish, German, Italian, French, Chinese simplified;



PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
-	IDLER MOUNTING SUPPORTS NOT INCLUDED ("BLANK")	
6012C	SPU (6012C)	BW up to 1.600 mm
IT8041PD	JB (IT8041PD)	
136033	MT 9101F (p/n 136033)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
508445 (x2)	IDLER MOUNTING SUPPORTS - "EU" STYLE (plate to weld idlers station's frame)	
6012C	SPU (6012C)	BW up to 1.600 mm
IT8041PD	JB (IT8041PD)	
136033	MT 9101F (p/n 136033)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
191076	IDLER MOUNTING SUPPORTS - "N.AM" STYLE (plate 64x222.3 mm with clamp)	
6012C	SPU (6012C)	BW up to 1.600 mm
IT8041PD	JB (IT8041PD)	
136033	MT 9101F (p/n 136033)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
191077	IDLER MOUNTING SUPPORTS - "N.AM+CAL" STYLE (plate 64x222.3 mm c/w clamp + support for weights)	
6012C	SPU (6012C)	BW up to 600 mm
IT8041PD	JB (IT8041PD)	
136033	MT 9101F (p/n 136033)	

**SERIES 10-101 IDEA R2 + CK101 BELT SCALES (No ATEX, No MID)**

Ramsey belt scale Series IDEA, by Thermo Scientific

Single weigh sensor designed to support n.1 idlers station, Thermo Ramsey's factory preassembled to be installed very easily on belt conveyors  
For belts having width < 600 mm (for belts having width < 1.600 mm it is possible to combine n.2 sensors)

Weighing assembly composed by:

- n.1 module made by cast aluminium c/w stainless steel blades;
- n.1 steel cover, painted;
- n.1 high precision load cell (stainless steel, IP68, C3, 3 mt cable);
- each module is complete with n.1 mt of flexible conduit with P69 galvanized steel cable glands.
- n.1 proximity speed pick-up (SPU) model 60-12P (or equivalent);
- n.1 junction box model IT8041PD, polycarbonate, IP54, for cable connections of two (2) load cells and one (1) speed pick-up;
- n.1 microprocessor control unit, model CK101F (p/n CK101FR240VAC), field mount IP65 (NEMA-4X) enclosure, 100-230Vac. Comes standard with (4) programmable relay out, (1) optoisolated digital in, (1) digital static out (FAIL or pulse), (1) Ethernet 10baseT (Modbus TCP/IP), (1) independent opto-insulated digital in and (1) optional expansion slot;
- working temperature (°C): -10 ÷ +50 (not condensing).



PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
-	IDLER MOUNTING SUPPORT NOT INCLUDED ("BLANK")	
6012C	SPU (6012C)	BW up to 1.600 mm
IT8041PD	JB (IT8041PD)	
CK101FR240VAC	INTEGRATOR (CK101FR240VAC)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
508445 (x2)	IDLER MOUNTING SUPPORTS - "EU" STYLE (plate to weld idlers station's frame)	
6012C	SPU (6012C)	BW up to 1.600 mm
IT8041PD	JB (IT8041PD)	
CK101FR240VAC	INTEGRATOR (CK101FR240VAC)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
191076	IDLER MOUNTING SUPPORTS - "N.AM" STYLE (plate 64x222.3 mm with clamp)	
6012C	SPU (6012C)	BW up to 1.600 mm
IT8041PD	JB (IT8041PD)	
CK101FR240VAC	INTEGRATOR (CK101FR240VAC)	

PART NO	SHORT DESCRIPTION	ADD INFO
10101-IDEA-R2-BLANK-XXX	DUAL IDEA "BLANK" MODULES (Load cell's capacity depends on the application)	
056767	BRACKETS TO FIX IDEA MODULES TO THE STRUINGERS OF THE CONVEYOR (LEFT/RIGHT)	
191077	IDLER MOUNTING SUPPORTS - "N.AM+CAL" STYLE (plate 64x222.3 mm c/w clamp + support for weights)	
6012C	SPU (6012C)	BW up to 600 mm
IT8041PD	JB (IT8041PD)	
CK101FR240VAC	INTEGRATOR (CK101FR240VAC)	

**SERIES IDEA R2 - BASIC OPTIONS FOR MECHANICAL PART**

PART NO	MODEL NO.
148763 (x2)	SS AISI 304 COVER FOR 10-101RZ
10-XX-SET/SPSSORI-MIX	SET OF SHIMS TO ALIGN THE BELT SCALE - Same as p/n 003141
ATEX 22 (consult Factory)	SYSTEM SUITABLE FOR INSTALLATION IN ATEX ZONE 22 (L.C, JB, SPU and MT or CK -MET)
ATEX 21 (consult Factory)	SYSTEM SUITABLE FOR INSTALLATION IN ATEX ZONE 21 (L.C, JB, SPU and MT-MET)

**SERIES 10-101RZ - PACKING**

Cardboard box for truck transport of n°1 BS 10-101-IDEA-R1

PART NO	MODEL NO.
PACKING 10-101RZ-XXX	N.2 CARDBOARD BOXES - STD - 50x50x50(h) CM (each) - GROSS WEIGHT ~45 KG (total)
LARGE QUANTITIES	CONSULT FACTORY

**Belt loading requirements:**

1. for 10-101-RZ2: applications with loads <14 kg (33 lbs) or >300 kg (650 lbs) require factory review;
2. minimum net weight must be greater than 15% of load cell capacity;
3. maximum net weight must not exceed 85% of load cell capacity;
4. Weight includes weight of idler, belt and material;
5. maximum idler spacing 1.200 mm (~46").

**Note:**

1. 10-101-RZ2 is supplied with heavy duty cast mounting brackets that mount directly to the conveyor stringers.