








17387200A

IND780 Accessory Kit Component Summary*

Item		PLC Interface Modules					Option Boards					
		Allen-Bradley RIO®	PROFIBUS®, panel encl.	PROFIBUS®, harsh encl.	ControlNet™	EtherNet / IP™	POWERCELL®	Analog Load Cell	IDNet	Discrete I/O, Solid State	Discrete I/O, Dry Contact Relay	Serial
Kit number		71209098	71209096	71209097	64057423	64058677	64057417	64057418	64057421	64057422	64057419	64057420
PCB w/ Connectors		1	1	1	1	1	1	1	1	1	1	1
Ferrite, large clamp					1	1				1	1	1
Ferrite, small clamp							1					
Ferrite, large cylinder		3	3	3				1				
Screws (M3x8)		3	3	3	3	3						
Cable Gland M16 brass							1	1		1	1	1
IDNet Harness									1* [64057381]			

* To avoid electromagnetic interference, the IDNet harness must be routed away from Analog Load Cell board/s, if installed.

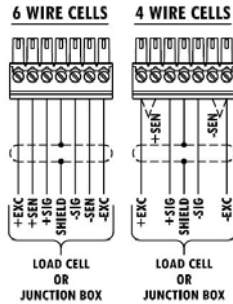
IND780 Accessory Terminations

Option Boards

Scale

Analog Scale

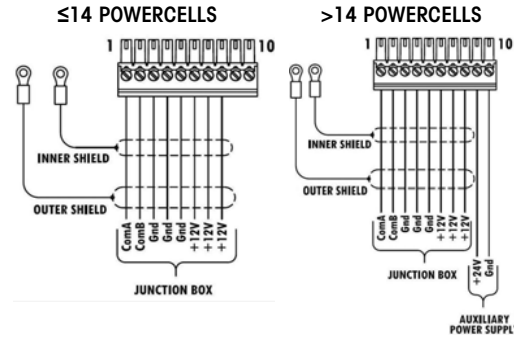
1. Use 6-conductor shielded cable.
2. Wire sizes: 18 AWG (0.832mm²) max., 24 AWG (0.205mm²) min.
3. Single 4-wire cells: Jumper +EXC to +SEN, and jumper -EXC to -SEN at IND780 terminal.



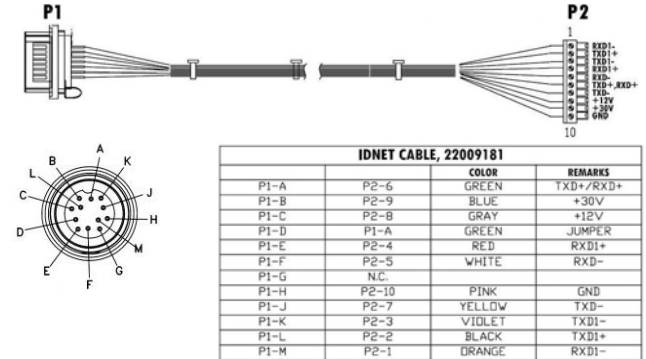
Multiple 4-wire load cells: Jumper +EXC to +SEN, and jumper -EXC to -SEN at junction box input terminals

POWERCELL®

1. Use double-shielded home run cable.
2. Wire sizes: 18 AWG (0.832mm²) max., 24 AWG (0.205mm²) min.

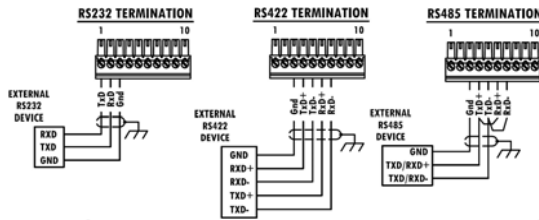


INDNET Scale Option Board



Serial

1. Use only shielded cable.
2. Max. cable length: 50 feet (15 m.).
3. Wire sizes: 18 AWG (0.832mm²) max., 24 AWG (0.205mm²) min.

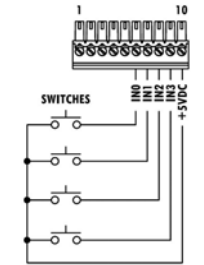


COM 1 PORT			
PIN	SIGNAL	FUNCTION	NOTES
1	RS1TX	RS-232 TRANSMIT DATA	
2	RS1RX	RS-232 RECEIVE DATA	
3	GND	RS-232 SIGNAL GROUND	
4	RS1RTS	RS-232 REQUEST TO SEND	
5	RS1CTS	RS-232 CLEAR TO SEND	
6	+12V	+12V OUT	

Discrete I/O

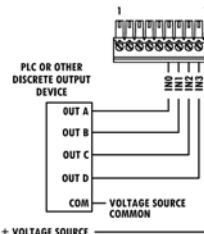
Active Input

1. Voltage is logic level 5 VDC. Low resistance contacts recommended. Max. cable length 20 feet (6 m.).
2. Do not bundle input wiring with power wiring or any other high energy cables.
3. Switches may be replaced with relay dry contacts.
4. Wire sizes: 14 AWG (2.088 mm²) max., 22 AWG (0.322 mm²) min.



Passive Input

1. Voltage 5-30 VDC, 10 mA max. current. Voltage polarity may be reversed.
2. Do not bundle input wiring with power wiring or any other high energy cables.
3. Wire sizes: 14 AWG (2.088 mm²) max., 22 AWG (0.322 mm²) min.



Relay Outputs

Dry Contact relay outputs:

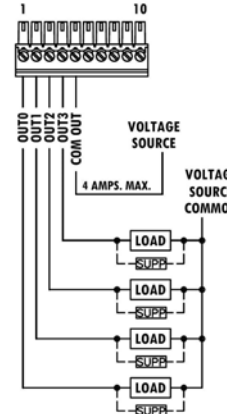
1. Dry contact relays.
2. Relay contact rating (resistive load): Nominal switching capacity: 30 VDC/VAC, 1A
3. Max. combined output current per board = 4 Amps.
4. All inductive loads must be suppressed.

Solid State relay outputs:

1. Solid state relays.
2. Solid state relay output rating:
AC: Max. 30 VAC, 1.0 Amp into resistive load.
DC: Max. 30 VDC, 1.0 Amp into resistive load.
3. Max. combined output current per board = 4 Amps.

Both:

- Wire sizes: 14 AWG (2.088 mm²) max., 22 AWG (0.322 mm²) min.



PLC Interface Modules

Allen-Bradley RIO®

1. Connection with twin axial cable (Blue Hose) shown.
2. Refer to Allen-Bradley Remote I/O documentation for termination resistor and other considerations
3. Wire sizes: 14 AWG (2.088 mm²) max., 22 AWG (0.322 mm²) min.



PROFIBUS®

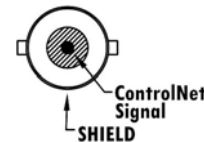
1. Use mating connectors and cable recommended for PROFIBUS connections.
2. Refer to PROFIBUS International documentation for other considerations.



PROFIBUS INTERFACE CONNECTOR	
PIN	SIGNAL
1	NOT USED
2	NOT USED
3	RxD/TxD +
4	RTS
5	GND BUS
6	+5V BUS
7	NOT USED
8	RxD/TxD -
9	NOT USED






ControlNet™

1. ControlNet connectivity is provided through two BNC coaxial connectors (cannels A and B).
2. The ControlNet board also includes an RJ45 network access port, for configuration and diagnostics. It is **not** an EtherNet network interface.



EtherNet / IP™

1. EtherNet / IP connectivity is provided via an EtherNet cable connected to the module's FJ-45 port.
2. DIP switches must all be set to OFF.

	<p>⚠ WARNING</p> <p>ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.</p>	<p>⚠ ATTENTION</p> <p>AUTORISEZ SEULEMENT LE PERSONNEL QUALIFIÉ À ENTREtenir CET ÉQUIPEMENT. SOYEZ PRUDENT LORSQUE DES VÉRIFICATIONS, TESTS ET AJUSTEMENTS DOIVENT ÊTRE EFFECTUÉS SOUS TENSION. NE PAS OBSERVER CES PRÉCAUTIONS RISQUERAIT DE CAUSER DES BLESSURES CORPORELLES.</p>	<p>⚠ ACHTUNG</p> <p>DIESES GERÄT DARF NUR VON QUALIFIZIERTEM PERSONAL GEWARTET WERDEN. BEI PRÜFUNGEN, TESTS UND EINSTELLUNGEN, DIE BEI EINGSCHALTETER STROMZUFUHR DURCHGEFÜHRT WERDEN MÜSSEN, VORSICHTIG VORGEHEN. DIE NICHT-BEACHTUNG DIESER VORSICHTSMASSNAHMEN KANN ZU VERLETZUNGEN FÜHREN.</p>	<p>⚠ AVVERTENZA</p> <p>SOLO PERSONALE QUALIFICATO DEVE ESSERE AUTORIZZATO AD INTERVENIRE SU QUESTO APPARECCHIO. FARE ATTENZIONE QUANDO SI DEVONO ESEGUIRE CONTROLLI, PROVE E REGOLAZIONI MENTRE L'APPARECCHIO E' ACCESO. LA MANCATA OSSERVANZA DI QUESTE PRECAUZIONI PUÒ CAUSARE INFORTUNI.</p>	<p>⚠ ADVERTENCIA</p> <p>SÓLO PERMITA QUE PERSONAL CALIFICADO DÉ SERVICIO ESTE EQUIPO. DEBE TENERSE CUIDADO AL EFECTUAR REVISIONES, PRUEBAS Y AJUSTES QUE DEBAN EFECTUARSE CON EL EQUIPO ENCENDIDO. DE LO CONTRARIO PUEDEN PRODUCIRSE LESIONES CORPORALES.</p>
	<p>⚠ WARNING</p> <p>DISCONNECT ALL POWER TO THIS UNIT BEFORE REMOVING THE FUSE OR SERVICING. TO DISCONNECT POWER, FIRST TURN THE POWER SWITCH TO OFF, THEN REMOVE THE POWER CORD FROM THE AC OUTLET.</p>	<p>⚠ ATTENTION</p> <p>DÉBRANCHEZ TOUT COURANT DE CETTE UNITÉ AVANT DE FAIRE L'INSTALLATION, D'EFFECTUER L'ENTRETIEN, LE NETTOYAGE OU AVANT DE RETIRER LE FUSIBLE. NE PAS OBSERVER CES PRÉCAUTIONS RISQUERAIT DE CAUSER DES BLESSURES CORPORELLES OU/ET D'ENDOMMAGER L'ÉQUIPEMENT.</p>	<p>⚠ ACHTUNG</p> <p>VOR DER INSTALLATION, WARTUNG UND REINIGUNG DES GERÄTS ODER DEM AUSBAU DER SICHERUNG JEGGLICHE STROMZUFUHR ZUM GERÄT UNTERBRECHEN. MISSACHTUNG KANN ZU VERLETZUNGEN UND/ODER SACHSCHADEN FÜHREN.</p>	<p>⚠ AVVERTENZA</p> <p>PRIMA DI ESEGUIRE L'INSTALLAZIONE, LA MANUTENZIONE, PULIRE O ESTRARRE IL FUSIBILE, SCOLLEGARE L'APPARECCHIO DALLA PRESA DI CORRENTE. LA MANCATA OSSERVANZA DI QUESTE PRECAUZIONI PUÒ CAUSARE INFORTUNI E/O DANNI ALLE COSE.</p>	<p>⚠ ADVERTENCIA</p> <p>DESCONECTE TODO EL SUMINISTRO ELÉCTRICO DE ESTA UNIDAD ANTES DE INSTALARLA, DARLE SERVICIO, LIMPIARLA O CAMBIARLE UN FUSIBLE. DE LO CONTRARIO PODRÍAN PRODUCIRSE LESIONES CORPORALES O DAÑOS FÍSICOS.</p>
	<p>⚠ CAUTION</p> <p>OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.</p>	<p>⚠ PRUDENCE</p> <p>SOYEZ PRUDENT LORSQUE VOUS MANIPULEZ DES APPAREILS SENSIBLES À L'ÉLECTROSTATIQUE.</p>	<p>⚠ VORSICHT</p> <p>BEACHTEN SIE DIE ENTSPRECHENDEN VORSICHTSMASSNAHMEN BEIM UMGANG MIT GERÄTEN, DIE EMPFINDLICH AUF ELEKTROSTATIK REAGIEREN.</p>	<p>⚠ ATTENZIONE</p> <p>OSSERVARE LE PRECAUZIONI NECESSARIE QUANDO SI MANEGGIANO DISPOSITIVI SENSIBILI ALLA SCARICA ELETTRISTATICA.</p>	<p>⚠ PRECAUCIÓN</p> <p>OBSERVE LAS MEDIDAS DE PRECAUCIÓN PERTINENTES AL MANEJAR DISPOSITIVOS SENSIBLES A LA ELECTRICIDAD ESTÁTICA.</p>
	<p>⚠ WARNING</p> <p>FOR CONTINUED PROTECTION AGAINST SHOCK HAZARD, CONNECT TO PROPERLY GROUNDED OUTLET ONLY. DO NOT REMOVE THE GROUND PRONG.</p>	<p>⚠ ATTENTION</p> <p>POUR ASSURER UNE PROTECTION CONTINUE CONTRE UNE DÉCHARGE ÉLECTRIQUE, BRANCHEZ UNIQUEMENT SUR UNE PRISE CORRECTEMENT RELIÉE À LA TERRE. NE RETIREZ PAS LA FICHE DE TERRE.</p>	<p>⚠ ACHTUNG</p> <p>FÜR KONTINUIERLICHEN SCHUTZ GEGEN ELEKTRO-SCHOCK NUR AN EINE ORDNUNGSGEMÄSS GEERDETE STECKDOSE ANSCHLIESSEN. DEN ERDUNGSSTIFT NICHT ENTFERNEN.</p>	<p>⚠ AVVERTENZA</p> <p>PER UNA PROTEZIONE CONTINUA CONTRO IL RISCHIO DI SCOSSE, COLLEGARE L'APPARECCHIO SOLO A UNA PRESA CON COLLEGAMENTO DI TERRA. NON TOGLIERE LO SPINOTTO PER LA MESSA A TERRA.</p>	<p>⚠ PRECAUCION</p> <p>PARA CONTAR CON PROTECCIÓN CONTINUA CONTRA UN PELIGRO DE DESCARGA ELÉCTRICA, CONECTE EL EQUIPO SÓLO EN TOMAS DE CORRIENTE CON LA DEBIDA CONEXIÓN A TIERRA. NO DESPRENDA EL CONTACTO DE TIERRA.</p>
	<p>⚠ WARNING</p> <p>DO NOT INSTALL OR PERFORM ANY SERVICE ON THIS EQUIPMENT BEFORE THE AREA HAS BEEN VERIFIED AS NON-HAZARDOUS BY PERSONNEL AUTHORIZED TO DO SO BY THE RESPONSIBLE CUSTOMER.</p>	<p>⚠ ATTENTION</p> <p>NE PAS INSTALLER OU EXECUTER AUCUNE MAINTENANCE SUR CET EQUIPEMENT TANT QUE LA ZONE N'A PAS ETE ATTESTEE COMME NON DANGEREUSE PAR UN PERSONNEL ABILITE PAR LE CLIENT</p>	<p>⚠ ACHTUNG</p> <p>KEINE INSTALLATIONS- ODER WARTUNGSARBEITEN DURCHFÜHREN, BEVOR DER ARBEITSBEREICH VOM VERANTWORTLICactHEN KUNDENPERSONAL ALS SICHER EINGESTUFT WURDE.</p>	<p>⚠ AVVERTENZA</p> <p>NON INSTALLARE OD EFFETTUARE ALCUNA ASSISTENZA SU QUESTO STRUMENTO PRIMA CHE L'AREA SIA STATA VERIFICATA COME NON-PERICOLOSA DA PERSONALE AUTORIZZATO A FARE QUESTO SU RESPONSABILITÀ DEL CLIENTE</p>	<p>⚠ ADVERTENCIA</p> <p>TODOS LOS EQUIPOS DEBEN SER INSTALADOS DE ACUERDO CON LAS INSTRUCCIONES DE INSTALACIÓN DETALLADAS EN ESTE MANUAL. EL NO SEGUIR LAS INSTRUCCIONES PUEDE PERJUDICAR LA SEGURIDAD INTRÍNSECA DE LA UNIDAD Y ANULAR LA APROBACIÓN DE LA BÁSCULA POR LA COMPAÑÍA DE SEGUROS DE LA FÁBRICA.</p>