

imc adaptor plug

The terminal plug is an adaptor for connecting the DSUB-15 sockets which are provided with most imc modules as the standard signal terminal connector to screw terminals directly clamped to cables. It is available in a number of varieties either for standard imc measurement devices or SL-Series devices (IP65). The plugs are available either customized for specific measurement modules respectively measurement modes as standard or as special plugs.

The **Standard-plug** is a 1:1 DSUB-15 to screw terminal adaptor. It can be used for all modules which come with the corresponding pin configuration. The plugs are electrically identical and can be distinguished by the labeling.

The **Special-plug** do not offer direct transition from the DSUB pins to the screw terminals, but instead come with extra functions:

For current measurement (up to 50 mA) with voltage channels the **Shunt-plug** (ACC/DSUBM-I2 and -I4) have a **built-in 50 Ω shunt**. The scaling factor 0.02 A/V must be set in order to display the current value.

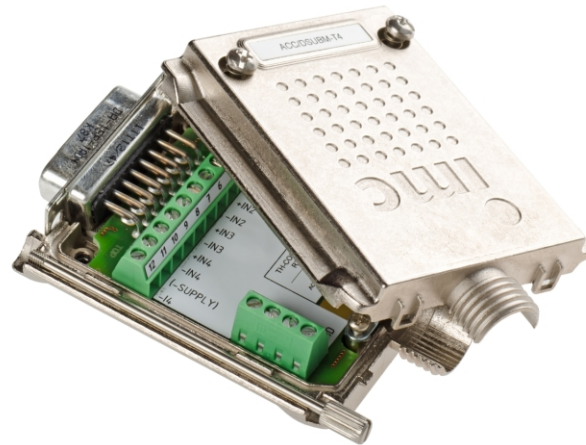
For temperature measurements, a special, patented **Thermo-plug** (ACC/DSUBM-T4) is available. The Thermo-plug contains an additional **internal PT1000 temperature sensor** for purposes of the cold-junction compensation needed for measurement with thermocouples. Thermocouples of any type can be connected at the differential inputs (+IN and -IN). Additionally, it has "auxiliary contacts" for connecting RTD/PT100 in 4-wire-configuration, where the reference current loop is already pre-wired internally.

The **Universal-plug** (ACC/DSUBM-UNI2) is provided for use with 8-channel universal measurement amplifiers of the types "UNI-8" and "UNI2-8". Each plug for one pair of channels has a PT1000 temperature sensor for thermocouple measurement purposes. If this functionality is not needed, a standard plug could be used instead for all other measurement types.

The **TEDS-plugs** are variants of the above mentioned types, which additionally support TEDS: TEDS saves records of sensor information in accordance with IEEE 1451.4 for use with imc Plug & Measure. The Sensor-TEDS (Transducer Electronic Data Sheets) are memory units (PROM) which can be addressed by the amplifier via a digital signal lead (OneWire). TEDS-plugs contain an electronic multiplexer which applies the individual TEDS signals provided at the DSUB connector to 2 or 4 single-channel contacts, to which either TEDS storage units or sensors can be connected.

HD-plugs are variant which use the High-Density connector DSUB-HD-26 instead of DSUB-15 connectors. They are available as standard plugs (1:1 connection, labeled for bridge amplifiers) as well as in a shunt version. These plugs are suited for the special "Compact" (C) versions of the bridge amplifier DCBC2-8 and BC-8, which have 2x DSUB-HD-26 (instead of 4 x DSUB-15) terminals.

The sealed versions **IP65-plugs** have identical outer dimensions. They provide additional sealing provisions and come with slightly longer locking screws in order to fit with the according threaded bolts on imc SL series devices (imc CRONOS-SL / imc CANSAS-SL) as well on the imc XT series (imc CRONOS-XT). The relative mechanical positions of these bolts differ between standard and SL and XT devices, being slightly recessed.



Metal-connector (ACC/DSUBM-xx)

Overview of the available plugs

Order Code		article number
Standard-plug		
• ACC/DSUBM-U4	DSUB-15 plug with screw terminals for 4-channel voltage measurement	13500166
• ACC/DSUBM-U4-IP65	sealed version	13500216
• ACC/DSUBM-TEDS-U4	version with TEDS support	13500189
• ACC/DSUBM-TEDS-U4-IP65	sealed TEDS version	13500330
• ACC/DSUBM-B2	DSUB-15 plug with screw terminals for 2-channel measurement of strain gauges, bridges and voltage	13500170
• ACC/DSUBM-B2-IP65	sealed version	13500218
• ACC/DSUBM-TEDS-B2	version with TEDS support	13500191
• ACC/DSUBM-TEDS-B2-IP65	sealed TEDS version	13500331
• ACC/DSUBM-B1	DSUB-15 plug with screw terminals for one channel measurement of strain gauges, bridges	13500181
• ACC/DSUBM-DI4-8	DSUB-15 plug for digital inputs	13500174
• ACC/DSUBM-DI4-8-IP65	sealed version	13500221
• ACC/DSUBM-DI2-8	DSUB-15 plug for digital inputs	13500172
• ACC/DSUBM-DI8	DSUB-15 plug for digital inputs	13500175
• ACC/DSUBM-DI8-IP65	sealed version	13500XXX
• ACC/DSUBM-DO8	DSUB-15 plug for digital outputs	13500173
• ACC/DSUBM-DO8-IP65	sealed version	13500220
• ACC/DSUBM-DO4	DSUB-15 plug for digital outputs	13500186
• ACC/DSUBM-DO-HC-8	DSUB-15 plug for digital outputs (high current)	13500198
• ACC/DSUBM-REL4	DSUB-15 plug for relay outputs	13500176
• ACC/DSUBM-ENC4	DSUB-15 plug for incremental inputs	13500171
• ACC/DSUBM-ENC4-IP65	sealed version	13500219
• ACC/DSUBM-DAC4	DSUB-15 plug for analog outputs	13500177
• ACC/DSUBM-DAC4-IP65	sealed version	13500223
• ACC/DSUBM-PWM4	DSUB-15 plug for 4x PWM	13500187
• ACC/DSUBM-SENT4	DSUB-15 plug for 4x SENT	13500182
• ACC/DSUBM-SYNTH4	DSUB-15 plug for synthesizer	13500194
• ACC/DSUBM-SYNTH4-IP65	sealed version	13500XXX
Universal-plug		
• ACC/DSUBM-UNI2	DSUB-15 plug with screw terminals for 2-channel voltage, current ¹ and bridge measurement as well as temperatures with PT100 and thermocouples with integrated cold junction compensation (CJC)	13500169
• ACC/DSUBM-UNI2-IP65	sealed version	13500215
• ACC/DSUBM-TEDS-UNI2	version with TEDS support	13500188
• ACC/DSUBM-TEDS-UNI2-IP65	sealed TEDS version	13500222

1 Single-end current measurement, for differential measurement an external shunt or the appropriate connector (ACC/DSUB(M)-I2) is necessary

Thermo-plug

- ACC/DSUBM-T4 DSUB-15 plug with screw terminals for 4-channel measurement of voltages as well as temperatures with PT100 and thermocouples with integrated cold junction compensation (CJC). 13500167
- ACC/DSUBM-T4-IP65 sealed version 13500217
- ACC/DSUBM-TEDS-T4 version with TEDS support 13500190
- ACC/DSUBM-TEDS-T4-IP65 sealed TEDS version 13500332

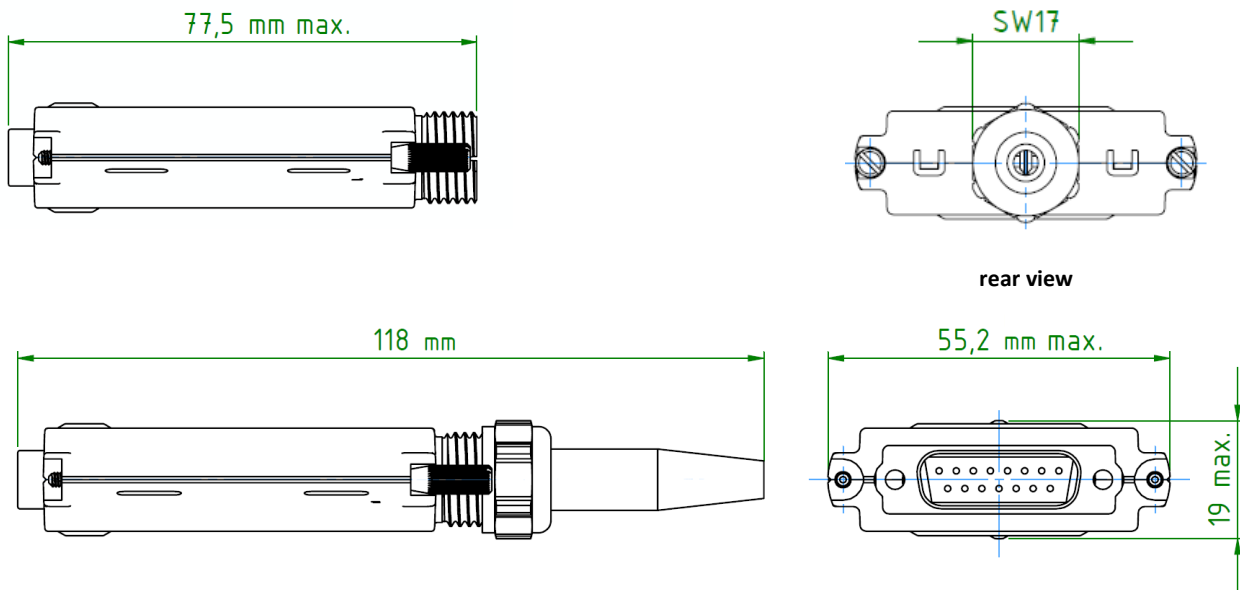
Shunt-plug

- ACC/DSUBM-I4 DSUB-15 plug with screw terminals for 4-channel current measurement of up to 50 mA (50 Ω shunt, scaling factor: 0.02 A/V) 13500168
- ACC/DSUBM-I4-IP65 sealed version 13500328
- ACC/DSUBM-TEDS-I4 version with TEDS support 13500192
- ACC/DSUBM-TEDS-I4-IP65 sealed TEDS version 13500333
- ACC/DSUBM-I2 DSUB-15 plug with screw terminals for 2-channel current measurement of up to 50 mA (50 Ω shunt, scaling factor: 0.02A/V) 13500180
- ACC/DSUBM-I2-IP65 sealed version 13500329
- ACC/DSUBM-TEDS-I2 version with TEDS support 13500193
- ACC/DSUBM-TEDS-I2-IP65 sealed TEDS version 13500334

High-Density (HD) plug

- ACC/DSUBM-HD-I4 DSUB-26 plug with screw terminals for 4-channel current measurement of up to 50 mA (50 Ω shunt, scaling factor: 0.02 A/V) 13500195
- ACC/DSUBM-HD-B4 DSUB-26 plug with screw terminals for 4-channel measurement of strain gauges, bridges and voltage 13500197

Mechanical drawings with dimensions



ACC/DSUBM-xx with bend relief sleeve

Note: The [locking screws](#) of the ACC/DSUBM-xx-IP65 are slightly longer.

Technical Specs - imc adaptor plug

Parameter	Value	Remarks
Terminal count		
Standard	18	e.g. ACC/DSUBM-B2, -U4, -UNI2,
Special	20 24 25	e.g. ACC/DSUBM-T4 ACC/DSUBM-TEDS-T4 ACC/DSUBM-HD-I4, HD-B4 (DSUB-26)
Housing material	metal	zinc die-cast (nickel-plated)
Connector type	DSUB-15 DSUB-HD-26	ACC/DSUBM-xx ACC/DSUBM-HD-xx
Protection level	IP20 IP65	ACC/DSUBM-xx ACC/DSUBM-xx-IP65
Usable wire cross section	max. 1.5 mm ² corresponds to AWG 16	braided with wire end sleeve
Cable passage max. aperture at sealing gasket	∅ 9 mm	both black and yellow
with ACC/DSUBM-xx	sealing gasket, black	with bend relief sleeve
with ACC/DSUBM-xx-IP65	sealing gasket, yellow	without bend relief sleeve
Gasket bore length range	5 to 7.5 mm	other sizes ² upon request
Locking screws	2x M2.5 X 58 mm 2x M2.5 X 65 mm	ACC/DSUBM-xx, suitable for corresponding latching to the imc device ACC/DSUBM-xx-IP65 suitable for the imc SL-Series devices (imc CRONOS-SL / imc CANSAS-SL) and imc XT-Series (imc CRONOS-XT)
Dimensions (L x B x H)	118 x 55.2 x 19 mm 77.5 x 55.2 x 19 mm	with bend relief sleeve without bend relief sleeve
Weight	typ. 140 g	metal connector

2 As of 2019-01-01, the previously used gasket bore: 4 to 6.5 mm is no longer available.