

## SEM1750 SMART POWERED PROCESS SIGNAL ISOLATOR/CONDITIONER

### ⚠️ IMPORTANT - CE & SAFETY REQUIREMENTS

This product is suitable for environment Installation category II pollution degree.  
 The product is classed as "PERMANENTLY CONNECTED EQUIPMENT".  
 Product must be DIN rail mounted, inside a suitable enclosure providing environmental protection to IP65 or greater.  
 DC supply must be derived from a local supply and not a distribution system.  
 To maintain CE EMC requirements, input and DC supply wires must be less than 30 meters.  
 The product contains no serviceable parts, or internal adjustments. No attempt must be made to repair this product. Faulty units must be returned to supplier for repair.  
 This product must be installed by a qualified person. All electrical wiring must be carried out in accordance with the appropriate regulations for the place of installation.  
 Before attempting any electrical connection work, please ensure all supplies are switched off.

ABSOLUTE MAXIMUM CONDITIONS (To exceed may cause damage to the unit):-

Supply Voltage	± 240VDC ± 240 VAC (Protected for over voltage)
Input Voltage	± 75V between any terminals
Input Current	± 75mA between terminals
Output	30 VDC
Ambient	Temperature -30 to 75°C Humidity 10 to 95% RH (Non condensing)
External Supply	1 Amp anti surge fuse recommended
Isolation	Between all five ports (C1 Input, Ch2 Input, Ch1 Output, Ch2 Output, Supply) 3.75 KVDC

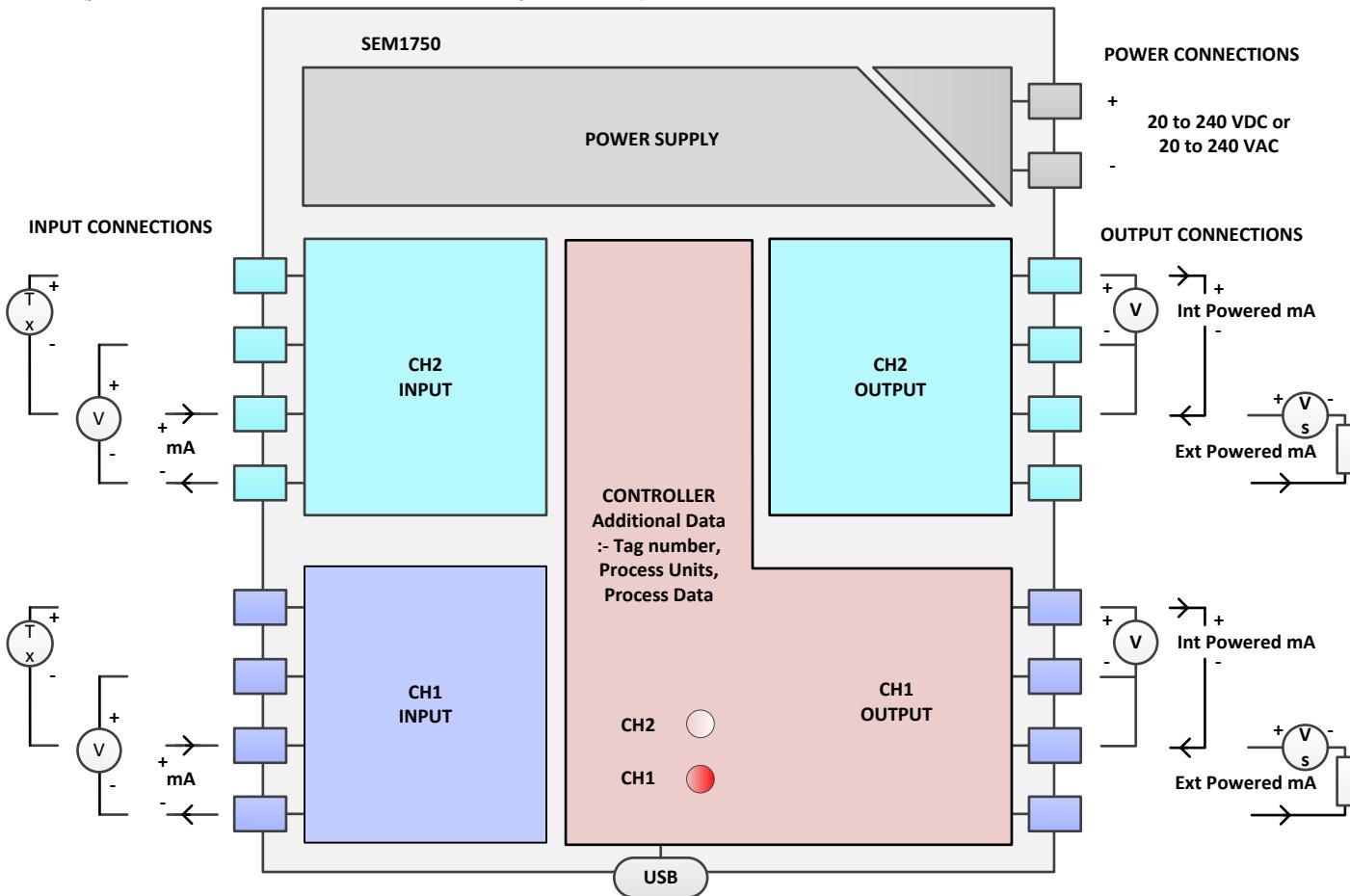


Every effort has been taken to ensure the accuracy of this document, however we do not accept responsibility for damage, injury, loss or expense resulting from errors and omissions, and we reserve the right of amendment without notice.

### RECEIVE AND UNPACKING

Please inspect the packaging and instrument thoroughly for any signs of transit damage. If the instrument has been damaged, please notify your supplier immediately.

### OPERATION (please refer to data sheet for full technical specification.)



### CONFIGURATION



FULL CONFIGURATION GUIDE IS PROVIDED WITH FREE USB\_SPEEDLINK SOFTWARE BY CLICKING THE HELP BUTTON.

This product is configured using the USB port of a PC running USB\_Speed\_Link software, available from your supplier. During configuration the product is powered direct from the USB port, removing the need for additional power. If the user wishes to monitor live process data during configuration, then power must be applied. Note Channel 1 Output and the USB port of the device share the same ground, therefore care must be taken to ensure isolation between PC and input circuit. This is best achieved by using a portable laptop or notebook PC. USB\_Speed\_Link software is provided with detailed help menu to guide the user through the simple configuration procedure. Unless specified at the time of order this product is supplied with the default configuration listed below.

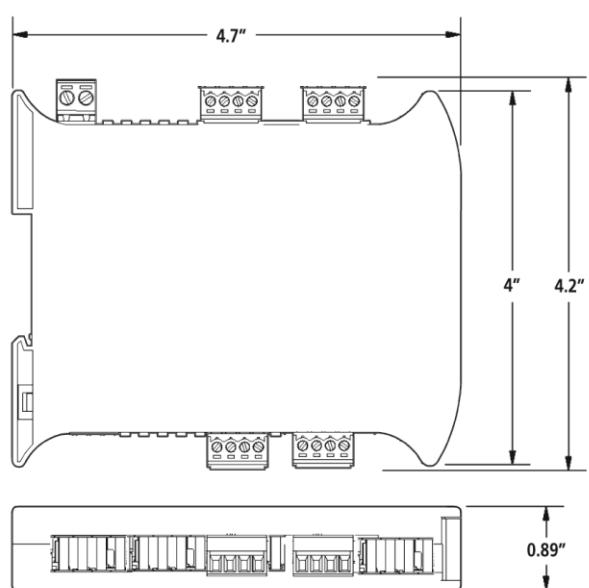
Please ensure drivers are installed via the help menu on the USB\_Speed\_Link before connecting the unit to a PC for the first time.



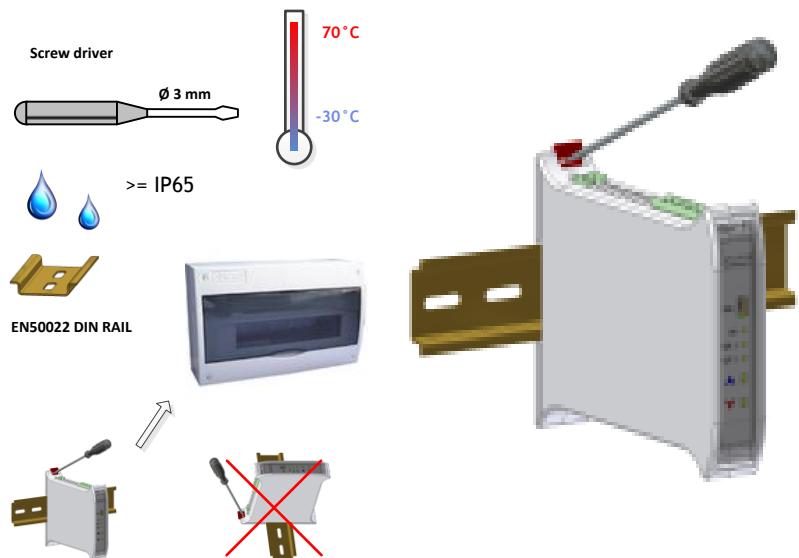
Factory default: Channel 1 Channel 2
Sample Rate = 420mS
Input range = 4 to 20mA
Output range = 4 to 20mA
Process Range = 4 to 20
Units = "PV"
Process Output = 4 to 20
Damping(rise & fall) = 0
Maths = Linear
Tag = ""



## MECHANICAL INSTALLATION



## MOUNTING



## ELECTRICAL INSTALLATION

1.0 TURN OFF SUPPLY BEFORE WORKING ON ANY ELECTRICAL CONNECTION.  
2.0 SUPPLY IS OVER VOLTAGE PROTECTED AND FUSED WITH INTERNAL RESSETTABLE FUSE.



### CONNECTION

For cable length < 3 Meters no shield or twist pair required.  
Use recommended types for cable length 3 to 30 meters.

### Screw Driver

