Technical Data

FUEL CONTROL SYSTEM TANK GAUGE INTERFACE KIT

Applies to the following models **only**:

- FC.TGE - FC.OCIO

Please read carefully before commencing installation

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PRODUCT DESCRIPTION

This Fuel Control System Tank Gauge Interface Kit is designed to be connected to any Hytek FC10 or FC20 fuel control system that is running Hytek FMO (Fuel Manager Online). Two or four OLE/TGE tank gauges (depending on model) can be connected to this unit in order to monitor live tank stocks via the FMO Fuel Manager Online software platform.

RS485 cable that connects to FC10 or FC20 units RS485 input connector terminal.	230v AC Mains power cable.

IMPORTANT WARNING NOTES

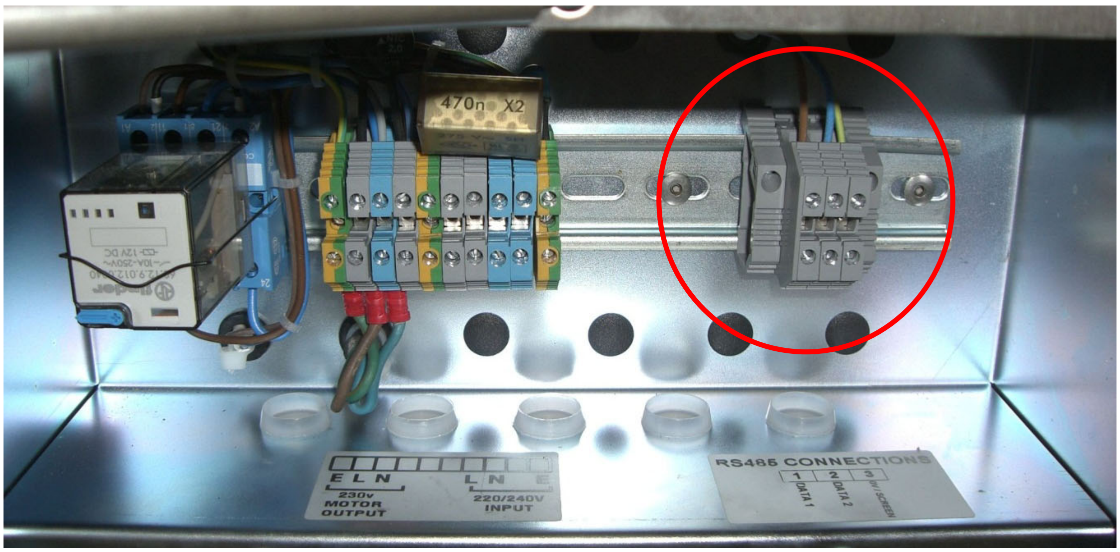
1. This tank gauge interface can only be fitted to a Hytek FC10 or FC20 **MASTER** unit**.** If this is not the case, then an additional RS485 convertor will need to be fitted to the FC10/FC20 unit before proceeding.
2. The installation must conform to all relevant electrical and local authority regulations and standards.
3. Installation of this equipment and any associated equipment should only be carried out by qualified fuel installation engineers.

INSTALLATION INSTRUCTIONS

1. Take the FC.TGE unit and mount to a suitable wall or structure using the stainless-steel back plate pre-fitted to the unit. This can be mounted to the outside of the FC10 cabinet if required. The unit is weatherproof to IP64.
2. The unit requires a 230v AC power supply at all times. This needs to be fused at 5A. A power flex with 3-pin UK plug is supplied.

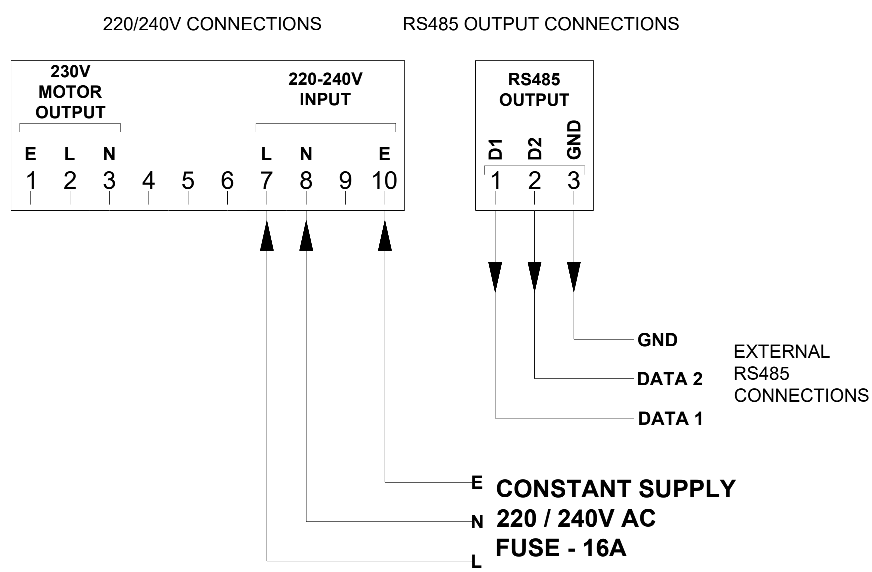
CONNECTING TO FC10 UNIT:

Connect the tank gauge interface unit's RS485 cable to the **FC10** pump unit. This connects into the RS485 terminals in the FC10 junction box. See photo below:



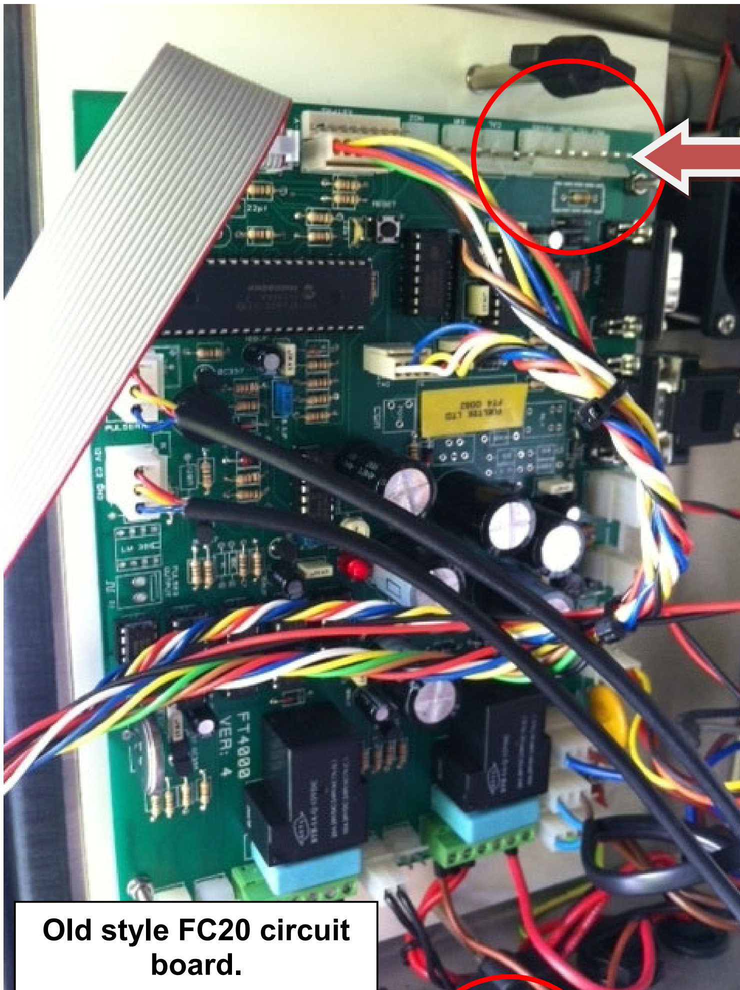
TANK GAUGE INTERFACE LEAD		FC10 RS485 TERMINALS
RED	→	BROWN/DATA1
YELLOW	→	BLUE/DATA2
GREEN	→	GREEN/YELLOW/GND

ALPHA FC10 MAIN JUNCTION BOX INSTALLATION WIRING DETAILS



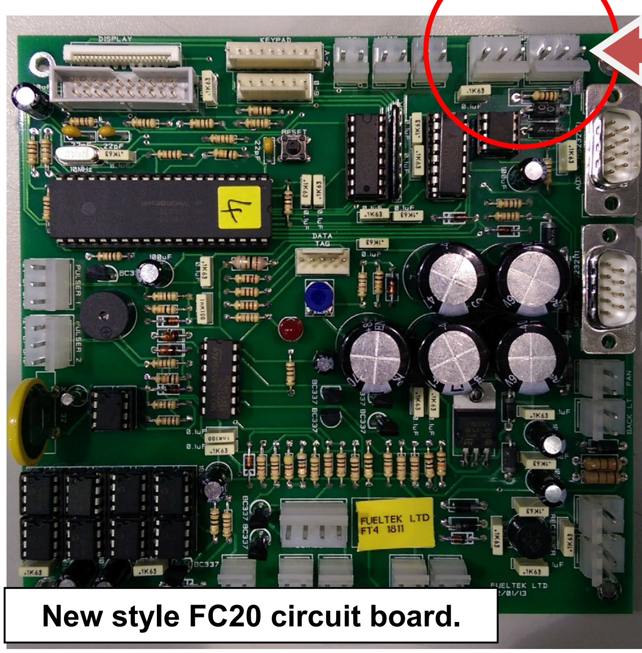
CONNECTING TO FC20 UNIT:

Connect the tank gauge interface unit's RS485 data cable to the **FC20** control unit. This connects onto either of the terminals marked "RS485" on the FC20 circuit board. See photo below:



RS485 connection x 2

Old style FC20 circuit board.



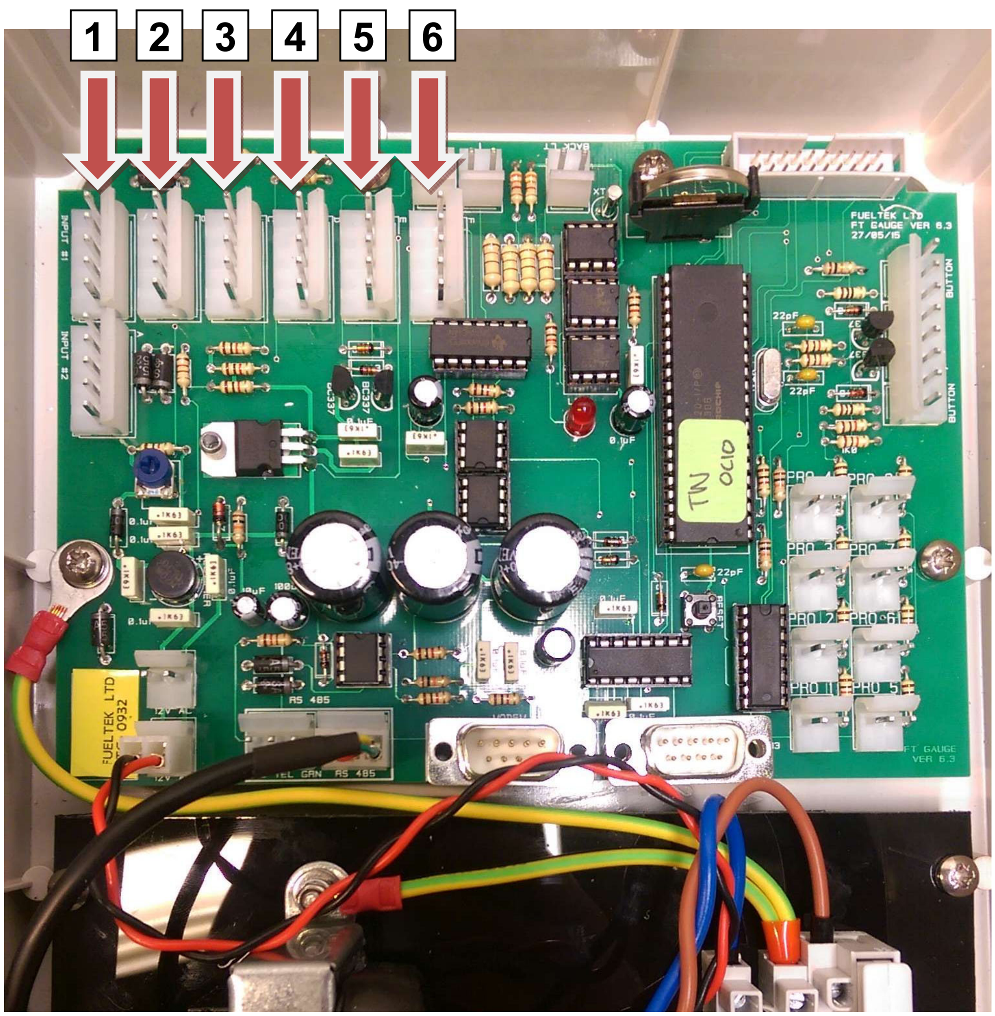
RS485 connection x 2

New style FC20 circuit board.

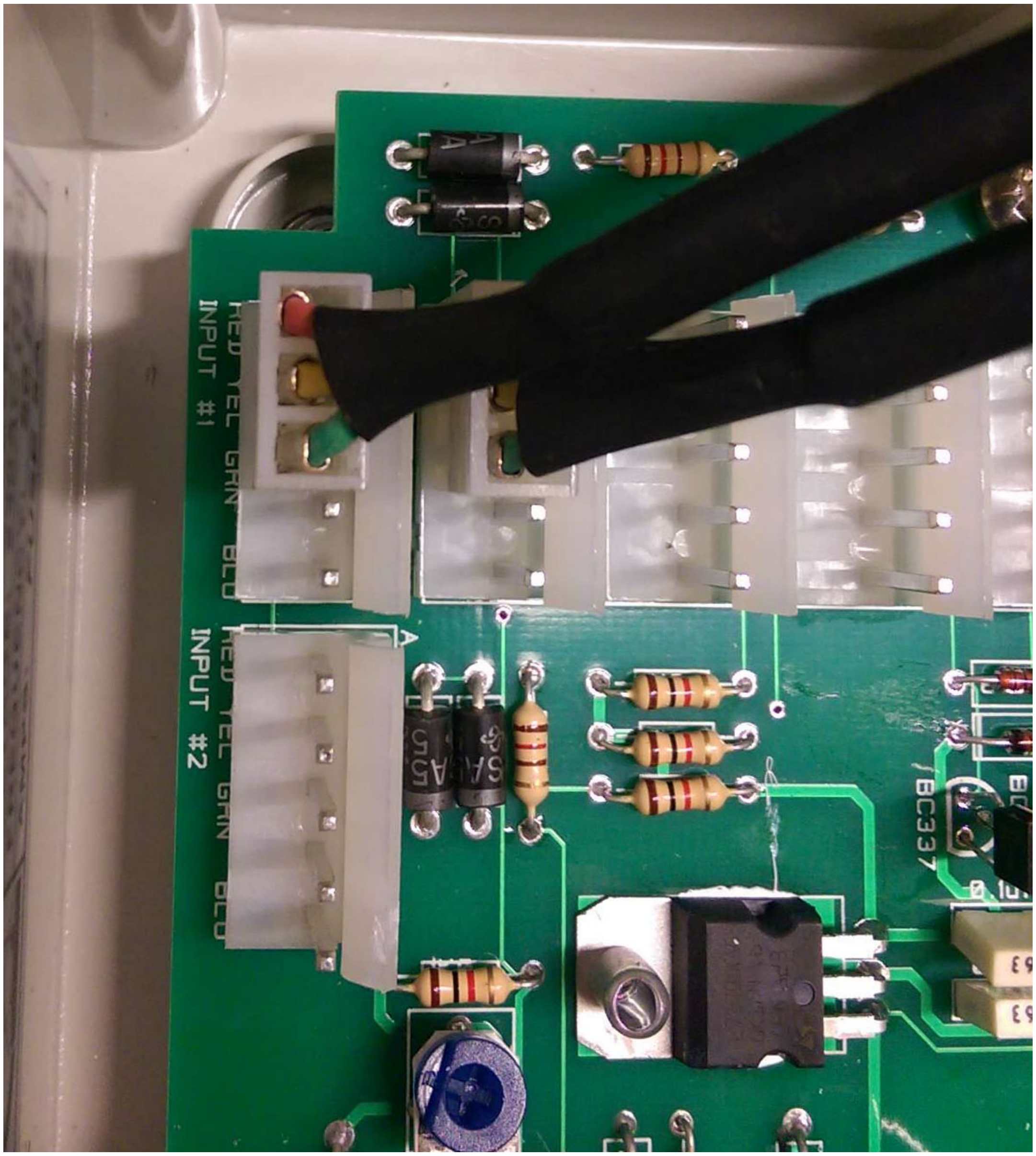
CONNECTING OLE TANK GAUGES TO THE INTERFACE:

Max 6 x OLE gauges per interface unit.

Connect OLE tank gauges to the interface unit.
There are flying leads with connector blocks supplied. You will need to use suitable shielded data cable (minimum 3-cores) to connect to each gauge.
Each gauge will be marked with a GAUGE MODBUS NUMBER 1-6. See photos below for numbered gauge connections on the circuit board. Ensure that the gauges are connected to the correct connector terminal.

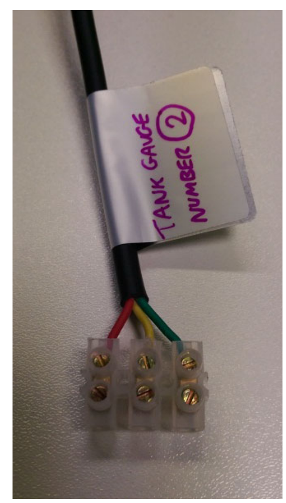


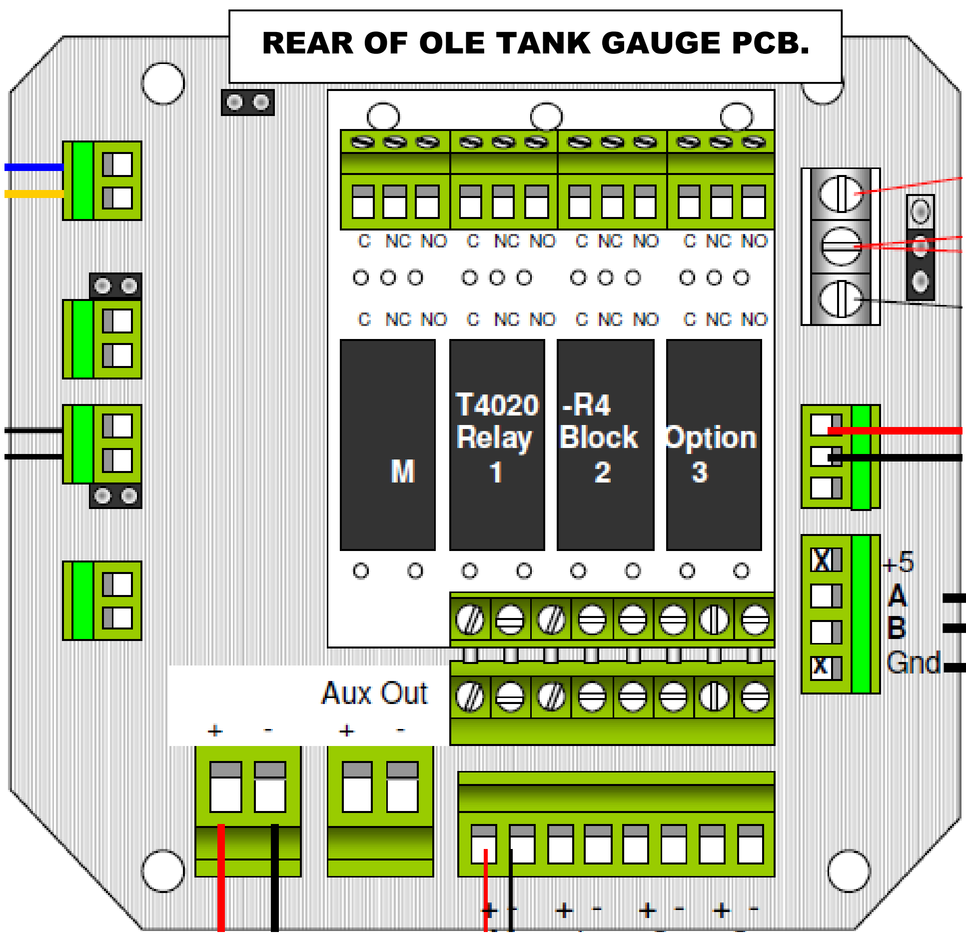
Ensure that the flying leads are connected as shown in the below photo.



Now you will need to connect the data cable(s) to the tank gauge(s). See diagram below for connections:

OLE TANK GAUGE CONNECTION	INTERFACE FLYING LEAD COLOUR
RS485 Serial “A” →	RED
RS485 Serial “B” →	YELLOW
RS485 Serial “GND →	GREEN

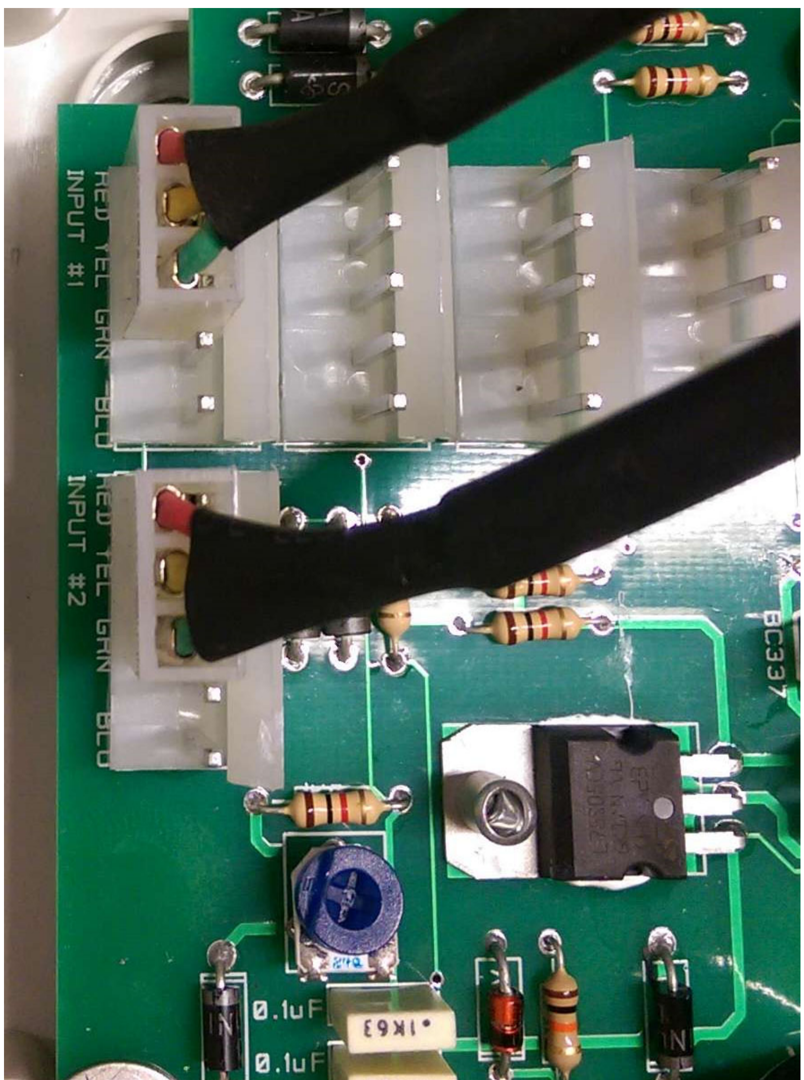




CONNECTING PIUSI OCIO TANK GAUGES TO THE INTERFACE:

Max 2 x OCIO gauges per unit.

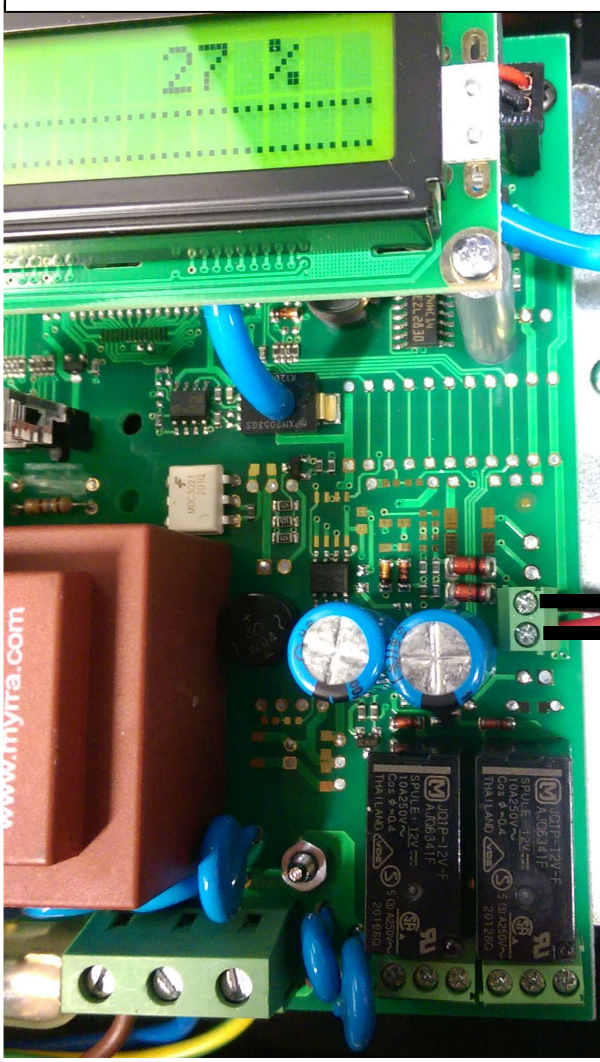
Connect the Piusi OCIO tank gauges to the interface unit.
There are flying leads with connector blocks supplied. You will need to use suitable shielded data cable (minimum 2-cores) to connect to each gauge.
See photos below for numbered gauge connections on the circuit board. Ensure that the gauges are connected to the correct connector terminal.



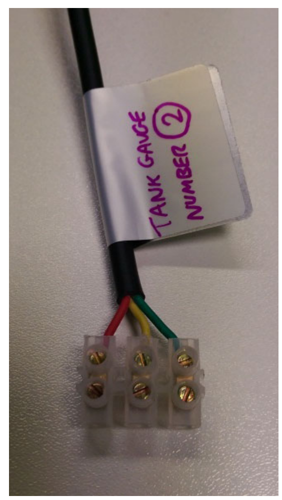
Now you will need to connect the data cable(s) to the tank gauge(s). See diagram below for connections:

OCIO TANK GAUGE CONNECTION		**INTERFACE FLYING LEAD COLOUR**
TOP CONNECTOR	→	RED
LOWER CONNECTOR	→	YELLOW

REAR OF OCIO TANK GAUGE PCB.



RED
YELLOW

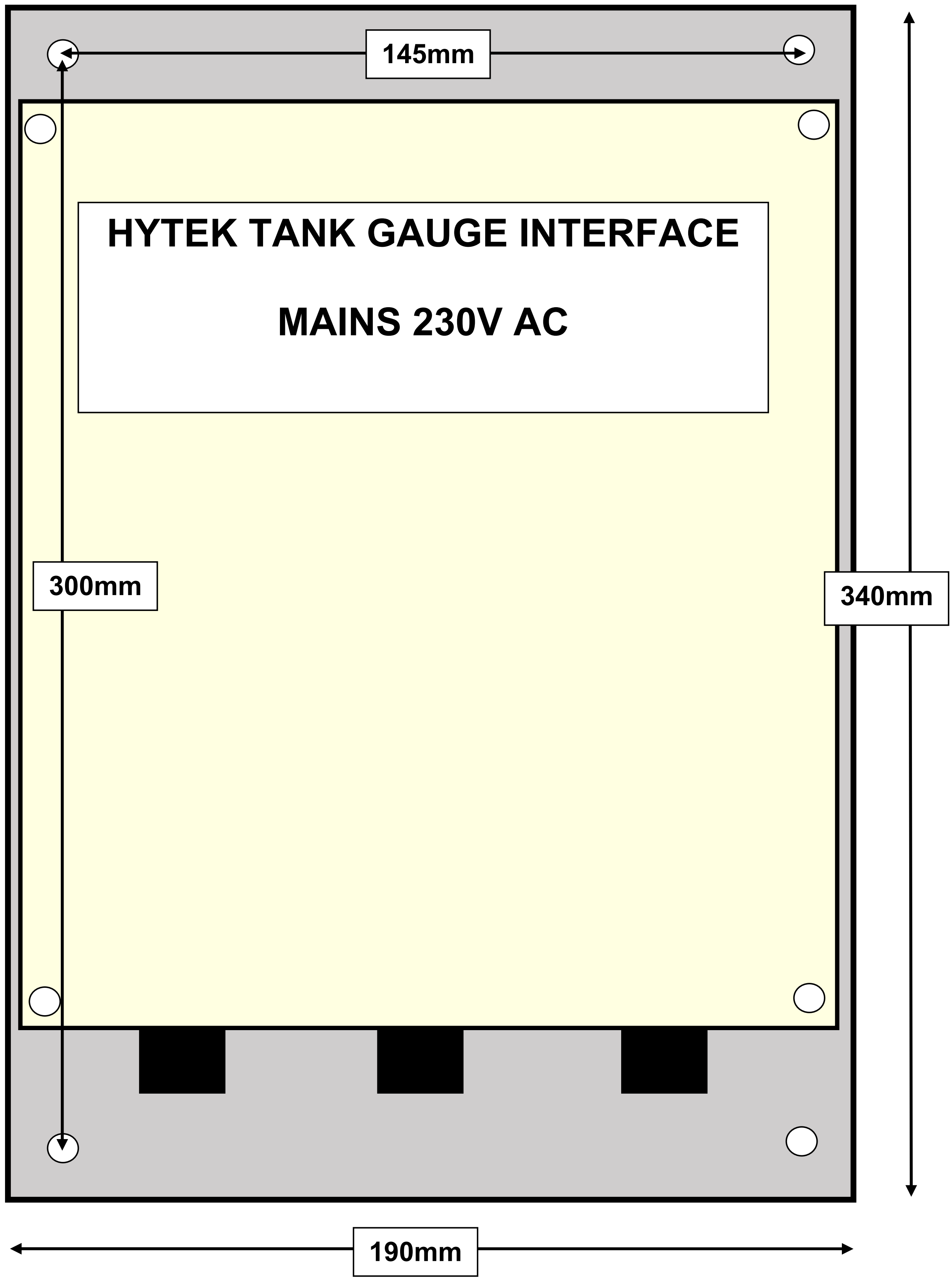


INTERFACE FLYING LEAD COLOUR

SOFTWARE SETUP:

Once the above setup has been carried out and the gauges powered up, please contact Hytek on 01279 815600 for remote gauge configuration and setting up the gauges on the Hytek FMO web based software.

DIMENSIONS



DEPTH = 100mm

DECLARATION OF CONFORMITY

HYTEK
FUEL & LUBRICATION EQUIPMENT

Company Name: **Hytek (GB) Ltd**

Address: **Delta House**
Green Street
Elsenham
Bishops Stortford
Hertfordshire
CM22 6DS

Date of Issue: **25th October 2022**

Equipment Details: **Electronic Tank Gauge Kit (Fuel Monitor) to FC10 Interface**
FC.TGE, FC.OCIO

Applicable Directives: & Standards
S1 2016 1091 Electromagnetic Compatibility Regulations
S1 2016 1101 Electrical Equipment Safety Regulations

S1 2008 1597 Supply of Machinery Safety Regulations

S1 2013 3113 Waste Electrical & Electronic Equipment Regulations

S1 2012 3032 Restriction of Use of Certain Hazardous Substances Regulations

Declaration Number: **Uk120 Issue 3**

On behalf of the above-named company, I declare under our sole responsibility that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives.

Clive Wellings

Clive Wellings, Process Co-ordinator
25th October 2022,
Bishops Stortford, Herts