

# Microcor® / Corrater® On-Line Systems Intelligent Interface Unit (IIU)



The **Intelligent Interface Unit** is designed for use on small to medium size Microcor and E-9020 Corrater on-line systems for easy integration into existing SCADA and DCS systems. The IIU may also be used on newer existing Legacy systems with 4-20MA Corrosometer® and Corrater® Transmitters.

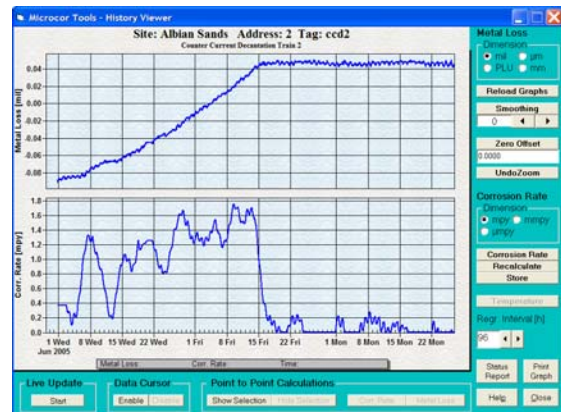
The IIU allows flexible input configurations for up to 100 transmitters in any combination of Microcor and Corrater E-9020. These include direct-wired configurations, or connection via TCP/IP converters over LAN/WAN connections. See some typical system layouts on the following page.

The primary purpose of the IIU is to provide the computation of corrosion rate from the metal loss made by the Microcor transmitters, since these calculations are too complex for most SCADA and DCS systems to achieve without custom programming. Output from the IIU to the SCADA or DCS system is available in engineering units over Modbus serial port or via OPC over the Network. For Microcor transmitters the available outputs are metal loss, standard computed corrosion rate, diurnal filtered corrosion rate in metric or imperial units, and transmitter status. For Corrater E-9020 the available outputs are instantaneous corrosion rate, pitting tendency (or imbalance) in metric or imperial units, and transmitter status.

The IIU is most commonly supplied in 19" rack mounted form as shown above, but is also available in a wall mount NEMA 4 and NEMA 4X enclosures.

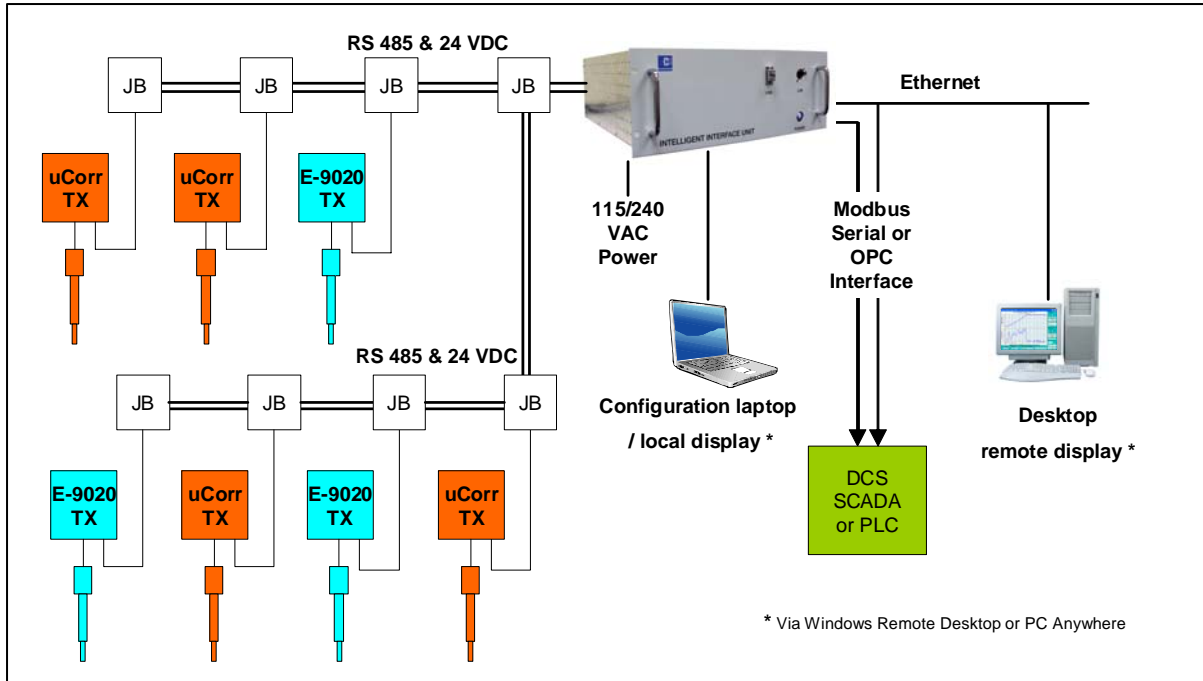
Configuration of the IIU is achieved through local connection of a laptop (not supplied) or over the LAN/WAN connection through PC Anywhere or Windows

Remote Desktop. The IIU provides data storage and archiving, with direct graphical displays of the data through the installed Microcor Tools software. This permits operation as either a blind interface to a SCADA or DCS system, or as a stand-alone corrosion data storage and analysis system.

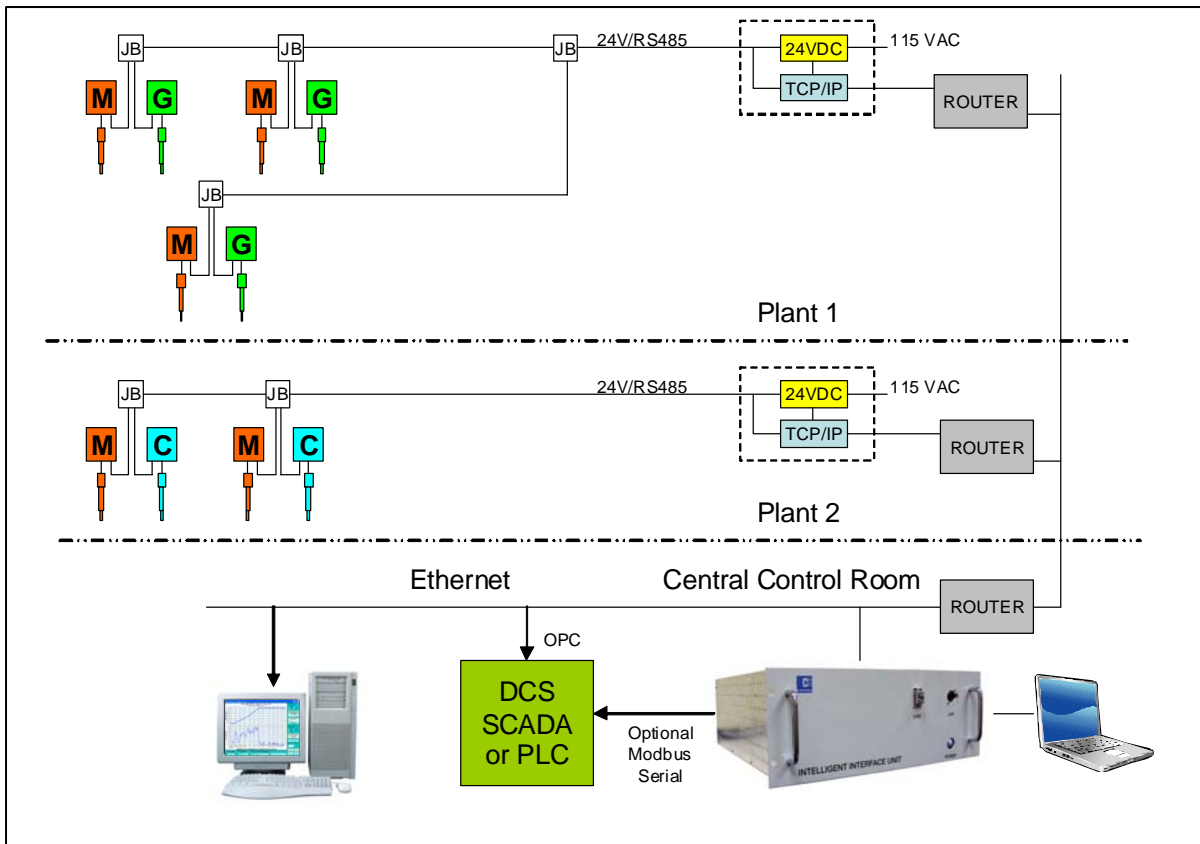


**IIU Corrosion Data Graphical Interface**

Although the IIU is fully user programmable, the IIU is normally supplied as part of a complete corrosion management system fully factory tested and configured for your application. On-site commissioning and training is given by our experienced field engineers on a day rate basis to meet your requirements.



Typical System with direct hard-wired Transmitter Inputs



Typical System with Transmitters connected over Network with TCP/IP Converters

## Specifications:

**Input:** Up to 100 Transmitters

**Transmitter Type:** Microcor, Corratel E-9020, Galvanic E-9020

**Transmitter Power Supply:** Integral in IIU

**Input Ports:** Two direct hard-wired RS 485 multi-drop cables with serial or parallel connection up to 4000ft (1200m) max longest cable run.

Up to 256 RS485 ports with separate TCP/IP converters and power supplies (sold separately) over LAN / WAN

**Output Ports:** One RS232 , One isolated RS485 two wire

**LAN Ports:** Two 10/100 – One rear panel, one front panel

**USB Ports:** Two – One rear panel, one front panel

**Modem:** One for dial-up remote access

**Power Supply:** 100 to 240 VAC / 2.5A

**Temperature Rating:** 0°C to 60°C

**Operating System:** Windows® XP Embedded

**Modbus:** ASCII and RTU, 32 bit float, swappable bits, settable slave ID, address range 40,000 upwards

**Dimensions:**

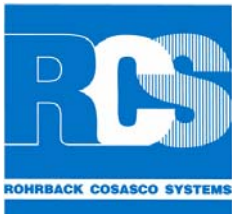
**19" Rack:** 19"W x 7"H x 22" D + 4" for cable clearance

**Wall Mount:** 24"W x 24"H x 8.5"D

**Other:** Internal connection for video/mouse/keyboard

## Ordering Information:

Model	Description	
IIU	Intelligent Interface Unit	
	<b>Code</b>	<b>Mounting</b>
	1	19" Rack Mounting
	2	Wall-mount NEMA 4 painted carbon steel
	3	Wall-mount NEMA 4X Stainless Steel 304
	<b>Code</b>	<b>Software</b>
	1	Microcor Tools with Output Interfaces for SCADA/DCS Systems
	2	Microcor Tools without Output Interfaces for Stand-alone operation
IIU - 1 - 1	← Example	



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