Facilities guide to Unit 3 Compliance

Hello there. We've heard stories of customers turning up to other EMC test labs who haven't had a working soldering iron or being charged £6 on top of a £30k test bill for drinks taken from fridge. That's not what we do.

Unit 3 Compliance is as much of a development lab and workshop as an EMC test facility. We aim to have a variety of equipment, consumables and tools in stock so that we can work on your product. It's not possible for us to have absolutely everything, so here is a list of what we do have so that you know what to bring.

In the event of shortages of basic materials we have a range of good trade counters within a short drive and next-day delivery from RS and Farnell for regular electronic components.

Getting Here

It's the days of Sat Nav so stick BD4 8AL in your device and it'll bring you right here. Turn off the main road between Appris and Euro Car Parts. We're in the same row of buildings as the latter. Look for the square blue sign.



Parking is directly outside the unit, park in front of the loading bay doors if full. There is a loading bay entrance for bulky/heavy equipment if required.

Essential Customer Support

- Tea: Yorkshire tea (of course), Earl Grey, selection of fruit, green and mint teas
- Coffee: Douwe Egberts gold (instant), Lavazza Rossa in the Aeropress
- Selection of cold fizzy drinks in the fridge (San Pellegrino, coke, etc)
- A wide selection of biscuits, some of them chocolate covered
- Lunch provided for customers on site

Network

- Development computer network for customer equipment with internet access and DHCP router (address range 192.168.2.11 upwards)
- 2.4GHz Wi-Fi access point including inside chambers (SSID and password available in advance by request)
- 100Base-TX Ethernet at all test stations
- 100Base-TX Power over Ethernet (PoE) also available
- Guest Wi-Fi

Power

- Power feeds in test chambers up to 230V, 32A
- Power feed outside chambers up to 3-phase 440V 32A
- 2 x dual 30V, 2A linear bench supplies
- 1 x 30V, 10A, 120W max SMPS bench supply
- 240V/110V step down and isolation transformers
- 240V, 10A variac
- HV power supply up to 60kV

Components

- SMT capacitors and resistor kits 0402 to 1206
- Various TH diodes, resistors and capacitors
- Extensive selection of Wurth Elektronik ferrite cores for EMI suppression
- Varistors and TVS diodes for surge suppression
- Fabric over foam gasket material, metal overbraid for cables
- Small stock of shielding components
- Copper and aluminium adhesive tape and foils (naturally)

PCB Rework

- Temperature controlled soldering station
- Hot air rework gun
- Solder, flux, braid, tweezers
- Microscopes, loupes and Optivisors

General Test Equipment

- RF signal generators up to 3GHz
- Digital oscilloscopes, 100MHz BW
- Spectrum analyser up to 30GHz, tracking generator up to 1.5GHz
- Curve tracer for component characteristic analysis

Safety Test Equipment

- HiPot tester up to 7kV
- PAT Tester
- Thermocouple meter and K type thermocouples
- FLIR Thermal camera
- Digital force meter

Workshop

Small workshop for making and modifying equipment with various tools including

- Range of general electronics hand tools (snips, pliers, wire strippers etc)
- Screwdrivers, Allan and Torx and security drivers, jewellery screwdrivers
- Spanners and sockets (metric and imperial), nut runners
- Supply of nuts, bolts, washers and screws
- Variety of tapes and adhesives
- Dremel multi-tool
- Pillar drill
- Bandsaw, circular saw
- Angle grinder (this has been used twice to fix EMC problems, don’t laugh!)
- Metal/plastics lathe
- Vertical milling machine
- Hand drill, impact driver

Compressed Air

Compressed air available around the lab, 8mm push fit, 4 bar, CFM figures available on request