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## **Reference document for microprocessor based traffic signal controller. Swarco ITC-2**

Signals and Controllers Ltd. have deployed several traffic controllers in Ghana since its inception over 36 years ago, including its own design.

28 Swarco ITC-2 controllers were introduced into the Ghanaian system in early April 2008 to replace outdated ones. They were deployed in both Accra the capital situated on the coast with humidity factors in the high readings of 90%+, and in the north of the country with high temperatures (45°C +) during the day and low temperatures (~22°C) at night, but relatively lower humidity. Much to our delight, and relief, these varying temperatures have not had any effect on the operation of these controllers, despite the lack of any enclosure temperature control device other than that provided on the controller itself. We are convinced that the ITC-2 is very robust and will meet with any climatic condition.

Within a few days of training in programming, we were able to quickly write up the programmes and deploy the ITC-2 controllers into the field with ease and confidence. The straightforward logic coupled with the wide range of parameters available to the programmer provides the flexibility to meet with varying situations and innovative techniques in programming. Simple icons keep the programmer focused. We also found the fault reporting features of the controller very precise.

The simulation software is most helpful in demonstrating, verifying and eliminating mistakes that could be transferred to commissioning.

We have had excellent programming and customer support including any questions on hardware. Updates to the programming software have always been offered and encouraged.

Being an engineering company in a developing world we had concerns about the quality of the modules/cards and the controllers' ability to withstand the poor quality of our national power delivery. Our confidence grew once more at the quality of engineering of the cards. We found extremely pleasing the in-built voltage protection power supply with the variable voltage limits settable in the programming. So far we have not lost any hardware nor have we had to reload any programmes due to programme data loss.

We highly recommend the ITC-2 controller to anyone who wants a trouble-free microprocessor based machine, but warn that you will fall in love with this product. Signals and Controllers Ltd. have put a halt to developing its own traffic signal controller in favour of one that is very advanced in this field, the ITC-2. Thank you Swarco.

Leonard Casely-Hayford  
(Executive Director)

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