27th IEEE Symposium on Fusion Engineering



Contribution ID: 306

Type: Poster

Control system designed for the electron cyclotron resonance heating system on J-TEXT

Wednesday 7 June 2017 13:40 (2 hours)

A control system based on compact reconfigurable I/O (cRIO)-9068 platform of National Instruments has been designed for the electron cyclotron resonance heating system on J-TEXT. The control system is mainly used for monitoring, timing, fast protection and slow protection of the ECRH system. The response time of fast protection is less than 10 μ s based on voltage comparators and field programmable gate array integrated on cRIO, and all the signals are transmitted with the fiber for isolation and stability transmission in the control system. The test results indicate that the designed control system can meet the requirements of the electron cyclotron resonance heating system of the J-TEXT.

Eligible for student paper award?

No

Authors: Mr YU, Z.X. (self); Dr XIA, D. H. (instructor); Dr ZHENG, W. (instructor); Mr HU, F. R. (class-mate); Prof. WANG, Z. J. (mentor)

Presenter: Mr YU, Z.X. (self)

Session Classification: W.POS: Poster Session W

Track Classification: Plasma heating and current drive