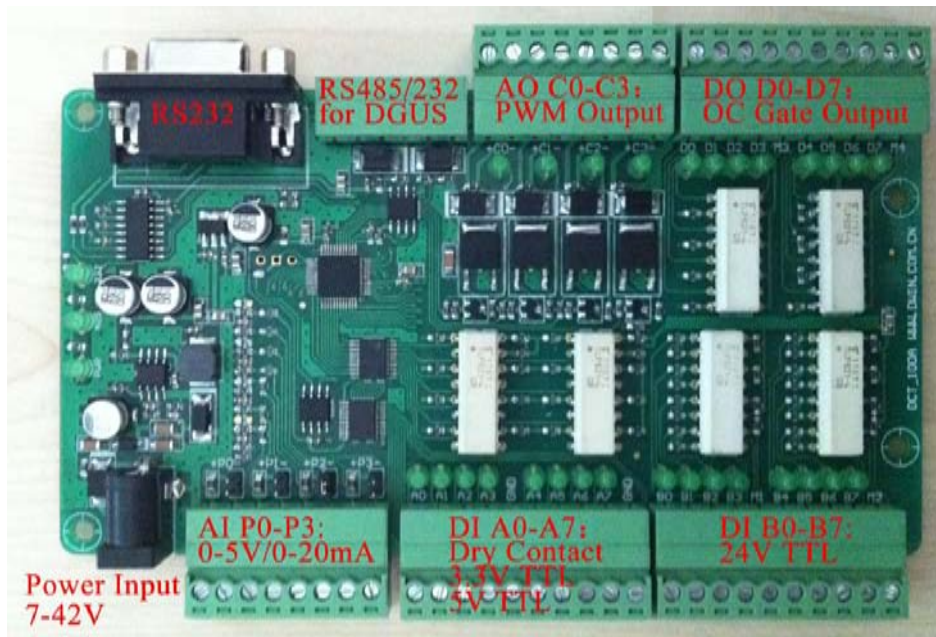# DCT_100 Expands DGUS LCM I/O Functions

Since volume production, DWIN DGUS LCM has been widely used and helped a lot of clients improve their product quality and competitiveness rapidly. In order to expand the application scope of DGUS LCM in industrial automation field, DWIN Technology released an I/O interface device named DCT_100.

DWIN DCT_100

In some medium and small industrial automation systems, DGUS LCM can be the host by connecting to a DCT_100.
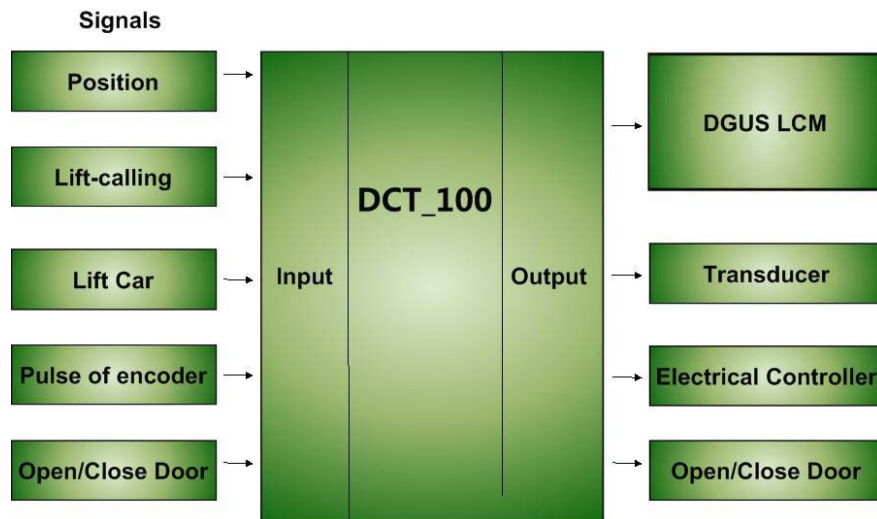
The typical features of DCT_100:

➢ On-board DC/DC converter, support DC 7-42V power input.

➢ Powering DCT_100 with 24V, the current of entire DCT_100 is less than 10mA.

➢ 4-way 0-5V/0-20mA unfenced analog input, with accuracy of ±1mV.

➢ 8-way dry contact, 3.3V TTL / 5V TTL compatible, voltage or pulse input, the minimum pulse width is 10ms.

➢ 8-way optical isolated 24V TTL voltage / pulse input, the minimum pulse width is 10ms.

➢ 8-way optical isolated Open Collector Gate output.

➢ 4-way unfenced, 16-bit PWM output, max output current of one way is 1A.

➢ A RS232 interface, the fixed value of baud rate is 115200bps.

- ➤ A RS485 interface baud rate ranges from 4800bps to 691200bps.

- ➤ 8 16-bit software timers, 4 32-bit software timers, 4 32-bit BCD format counters.

- ➤ The communication protocol is compatible with DGUS LCM.

- ➤ Support re-development, the code of 8051 can be directly used to run with DCT_100 which have 52KB code space, 2.75KB RAM, 32MIPS

- ➤ LEDs show the status of power, communication, input and output.

- ➤ Connect other devices with 3.81mm Phoenix Connector.

- ➤ Wide working temperature of -40/+85℃.

There are some applications about DGUS 18WT series combined with DCT_100 replacing HMI combined with PLC, the solution will be more reliable and flexible in some projects of automation:
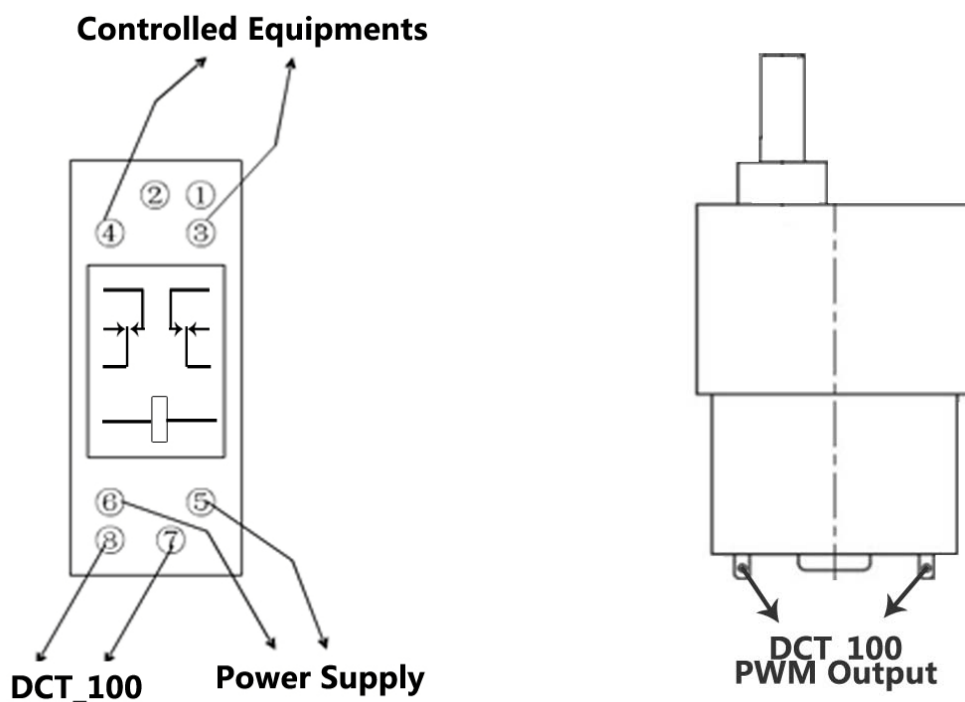
1. Elevator System

2. Relay Control

DGUS LCM with DCT_100 control relay as a controlling switch which is widely used in intelligent control, mechatronics and power electronic equipment.

3. DC Motor Control

DC Motors with broad regulation range and reliability play an important role in many areas of machinery production.

DC Motor speed can be tuned to the desired value by changing the PWM output of DCT_100.