



SPECIFICATIONS
 SERIAL TYPE OPTICAL DATA
 TRANSMISSION DEVICE
 DMW-GFT/GFR



Europe's Official HOKUYO Distributor

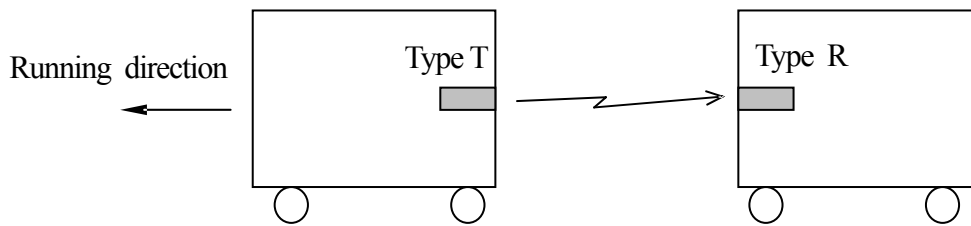
1010 Cambourne Business Park, Cambridge, CB23 6DP UK.

Tel +44 (1223) 923 930 : Fax +44 (1223) 923 940
 info@sentekeurope.com : www.sentekeurope.com

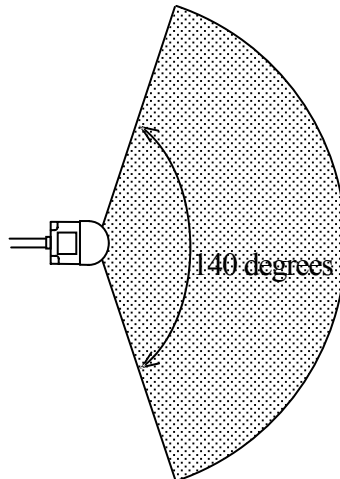
 X 1	Measures against high frequency noise			4	Apr.2'01	Iguchi	FA-4256
 X	Cover molded and model No. changed			All	Feb.21'01	Iguchi	FA-4211
Symbol	Amended reason			Pages	Date	Corrector	Amended No.
Approved by	Checked by	Drawn by	Designed by	Title	Serial Type Optical Data Transmission Device DMW-GFT/GFR Specifications		
			IGUCHI	Drawing No.			

1. General

This device controls the distance between AGV's by transmitting position of running AGV to rear AGV. Transmission area is wider in order to possible to control on both straight and curved line.



2. Area characteristic(Horizontal direction)



Communication distance : 4.5m
 Directional angle(Full angle) : 140 degrees

3. Specifications

Products name	Transmitter	Receiver
Model No.	DMW-GFT	DMW-GFR
Power source	24VDC +/- 10%	
Current consumption	200mA	
Transmission speed	DC to 19200BPS	
Transmission method	One way transmission	
Modulated frequency	300kHz	
LED	POW : POWER lamp SD : Input data lamp	POW : POWER lamp RD : Output data lamp CD : Light-reception lamp L1 : } Light-reception level lamp L2 : }
Interface	RS-422	
Connection	Cable 2m	
Ambient illuminance	10,000lux or less	
Ambient temperature	-10 to 50 degrees C	
Vibration resistance	Double amplitude 1.5mm, 10 to 50Hz, Each 10 time in X, Y and Z directions	
Impact resistance	490m/s ² Each 10 time in X, Y and Z directions	
Protective structure	IP54	

Title	Serial Type Optical Data Transmission Device DMW-GFT/GFR Specifications	Drawing No.	C-42-2858	2/4
-------	--	----------------	-----------	-----

4. Connection

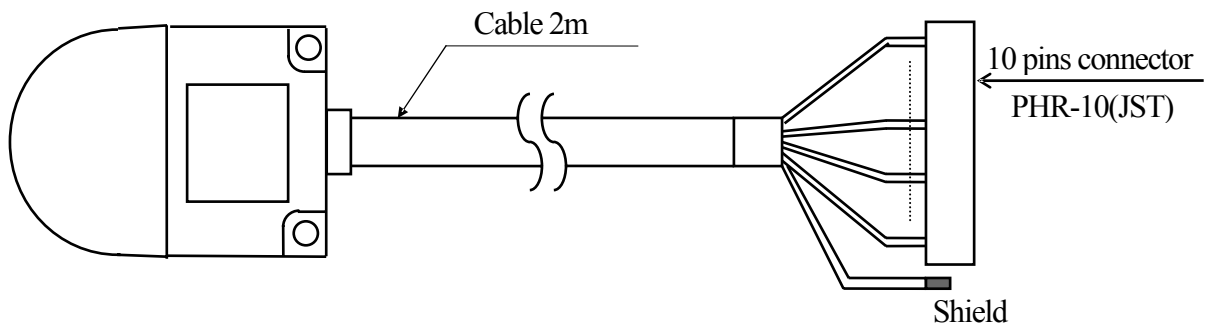
4-1. Transmitter

Symbol	Specifications	Circuit/Remark
+VIN	Power source 24VDC	_____
-VIN		
+SD	Transmission data + RS-422 input signal	
-SD		
SG		

4-2. Receiver

Symbol	Specifications	Circuit/Remark
+VIN	Power source 24VDC	_____
-VIN		
CD	Carrier detect(Approx. 6m)	
L1	Light-reception level output(Approx. 4m)	
L2	Light-reception level output(Approx. 2m)	
+RD	Reception data + RS-422 output signal	
-RD		
SG		

5. Wiring



Colors	Pin No.	Functions	
		Transmitter	Receiver
Black	1	+SD	+RD
Brown	2	-SD	-RD
Red	3	SG	SG
	4		
Purple	5		CD
Gray	6		L1
White	7		L2
Yellow/Green	8		COM(0V)
Yellow/Red	9	+VIN	
Yellow/Black	10	-VIN	
Shield		Shield	

Note) Make sure to connect shield to 2FG.



Europe's Official HOKUYO Distributor

1010 Cambourne Business Park, Cambridge, CB23 6DP UK.

Tel +44 (1223) 923 930 : Fax +44 (1223) 923 940

info@sentekeurope.com : www.sentekeurope.com

Title	Serial Type Optical Data Transmission Device DMW-GFT/GFR Specifications	Drawing No.	C-42-2858	4/4
-------	--	----------------	-----------	-----