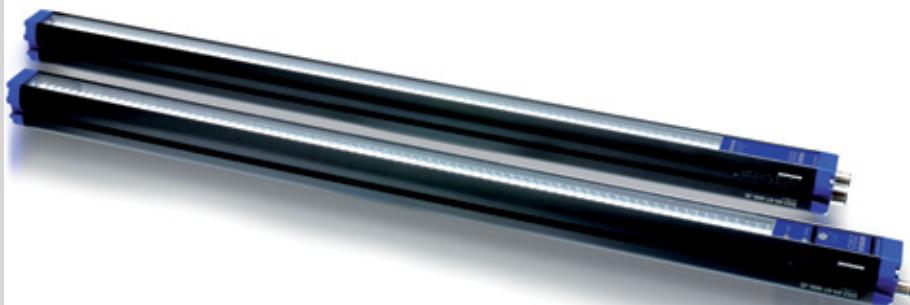


DS2 SERIES

The **AREAscan™** family of the **DS2** series covers controlled heights ranging from 150 to 2500mm, with 5m operating distances for high resolution versions, or 10m for low resolution versions. Digital resolution is 12mm or 25mm while relative measurement precision is $\pm 6\text{mm}$ or $\pm 22.5\text{mm}$. Models with RS485 serial port or ETHERNET host interface are available; ETHERNET models are only high resolution versions. The device configuration can be set manually thanks to internal dip-switches, or using graphic interface from remote PC for serial models. ETHERNET models can be programmed only from user interface. Once loaded the program on the flash memory, the device functions in the stand-alone mode. The serial or ETHERNET interface transmits the measurement in a binary or ASCII code, the operating status control as well as the setting of the different baud-rate versions. The **DS2** light arrays suits different height or dimensional measurement applications ingeneral, in automatic material handling.



MEASUREMENT

HIGHLIGHTS

- Measurement in automatic material handling
- Versions with 6 or 25mm digital resolution
- Relative measurement precision $\pm 6\text{mm}$ or $\pm 22.5\text{mm}$.
- 150 - 2500 mm controlled height
- Operating distance up to 5m or 10m
- Digital PNP output
- 0-10 V analogue output
- Serial RS485 protocol or ETHERNET host interface

APPLICATIONS

Automotive



Material Handling

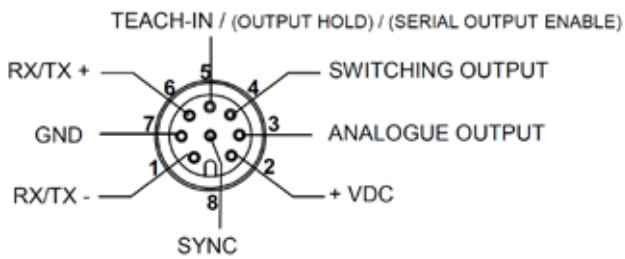


Automatic Warehouse



CONNECTIONS

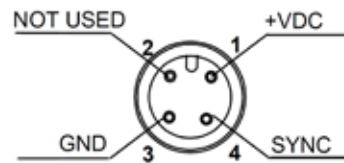
SERIAL VERSION - RX



Main connector: M12 8-pole connector

1	= white	= RX/TX -
2	= brown	= +VDC
3	= green	= ANALOGUE OUT
4	= yellow	= SWITCHING OUTPUT
5	= grey	= TEACH-IN / (OUT HOLD) / (SERIAL OUT ENABLE)
6	= pink	= RX/TX +
7	= blue	= GND
8	= red	= SYNC

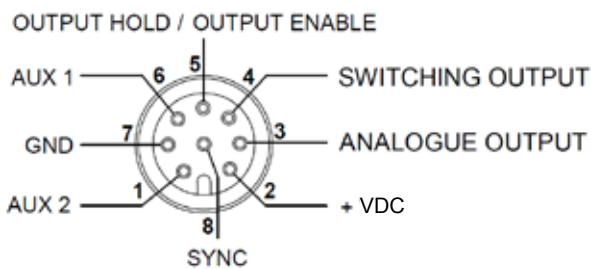
SERIAL VERSION - TX



Main connector: M12 4-pole connector

1	= brown	= +VDC
2	= white	= NOT USED
3	= blue	= GND
4	= black	= SYNC

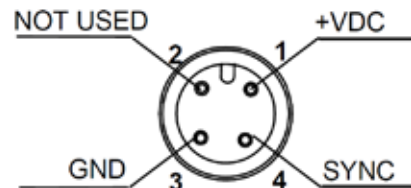
ETHERNET VERSION - RX



Main connector: M12 8-pole connector

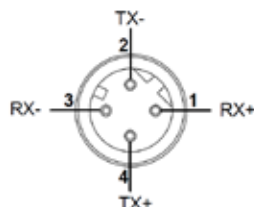
1	= white	= AUX 2
2	= brown	= +VDC
3	= green	= ANALOGUE OUT
4	= yellow	= SWITCHING OUTPUT
5	= grey	= OUT HOLD / OUT ENABLE
6	= pink	= AUX 1
7	= blue	= GND
8	= red	= SYNC

ETHERNET VERSION - TX



Main connector: M12 4-pole connector

1	= brown	= +VDC
2	= white	= NOT USED
3	= blue	= GND
4	= black	= SYNC



Secondary connector: M12 4-pole connector

1	= brown	= RX +
2	= white	= TX -
3	= blue	= RX -
4	= black	= TX +

TECHNICAL DATA

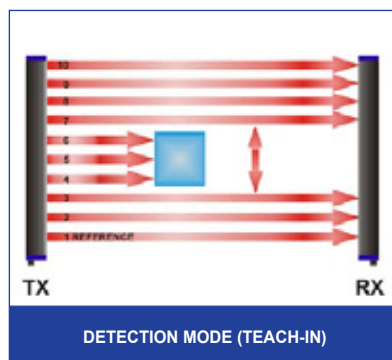
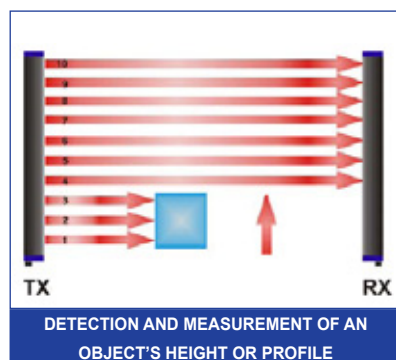
Response time - Serial version

	Tmin (msec)							Tmax (msec)
		T2	T3	T4	T5	T6	T7	
Model	Configuration							
	Top beam	Top beam	Top beam	Top beam	Complete Beams Status	Complete Beams Status	Complete Beams Status	Complete Beams Status
	57600 baud	9600 baud	57600 baud	9600 baud	57600 baud	9600 baud	57600 baud	9600 baud
	binary	binary	ASCII	ASCII	binary	binary	ASCII	ASCII
DS2-05-07-015-JV	5.5	12.5	5.05	13	5.5	15	6.5	10
DS2-05-07-030-JV	7	14	7	14.5	7	18	8.5	21
DS2-05-07-045-JV	8.5	15.5	8.5	16	8.5	21	10	24
DS2-05-07-060-JV	10	17	10	18	10	26	12	38
DS2-05-07-075-JV	11.5	18.5	11.5	19	11.5	31	15	44
DS2-05-07-090-JV	13	20	13	20	13	36	17	54
DS2-05-07-105-JV	14.5	21.5	14.5	22	14.5	40	19	62
DS2-05-07-120-JV	17	24	17	24	17	44	21	70
DS2-05-07-135-JV	18.5	25	19	26	19	48	23	80
DS2-05-07-150-JV	20	26.5	21	28	21	53	25	84
DS2-05-07-165-JV	22	28	23	30	23	56	28	91
DS2-05-25-045-JV	5	11	5	11	5	13	6	18
DS2-05-25-060-JV	5.5	12	5.5	12.5	5.5	14.5	6.5	19.5
DS2-05-25-075-JV	6	13	6	13.5	6	16	7	21
DS2-05-25-090-JV	6.5	13.5	6.5	14.5	6.5	17.5	7.5	22.5

Response time - ETHERNET version

Model	Configuration			
	Top Beam		Complete Beams Status	
	binary	ASCII	binary	ASCII
DS2-05-07-060-JE	10	10	10	12
DS2-05-07-075-JE	11.5	11.5	11.5	15
DS2-05-07-090-JE	13	13	13	17
DS2-05-07-120-JE	17	17	17	21
DS2-05-07-150-JE	20	21	21	25
DS2-05-07-165-JE	22	23	23	28

FUNCTIONING MODE EXAMPLES



And more applications:

- Object height measurement (vertical mounting);
- Object width measurement (horizontal mounting);
- Object distance measurement (horizontal mounting);
- Object volume measurement (vertical and horizontal combination);
- Single or multiple object presence and/or position detection in a given area;
- Missing label detection on multiple lanes;
- Vertical warehouse drawers positioning;
- Box or other objects profiling on conveyors;
- Web edges or center guiding;
- Cartoners, stackers and palletizers.