4.4. Layout of sensors
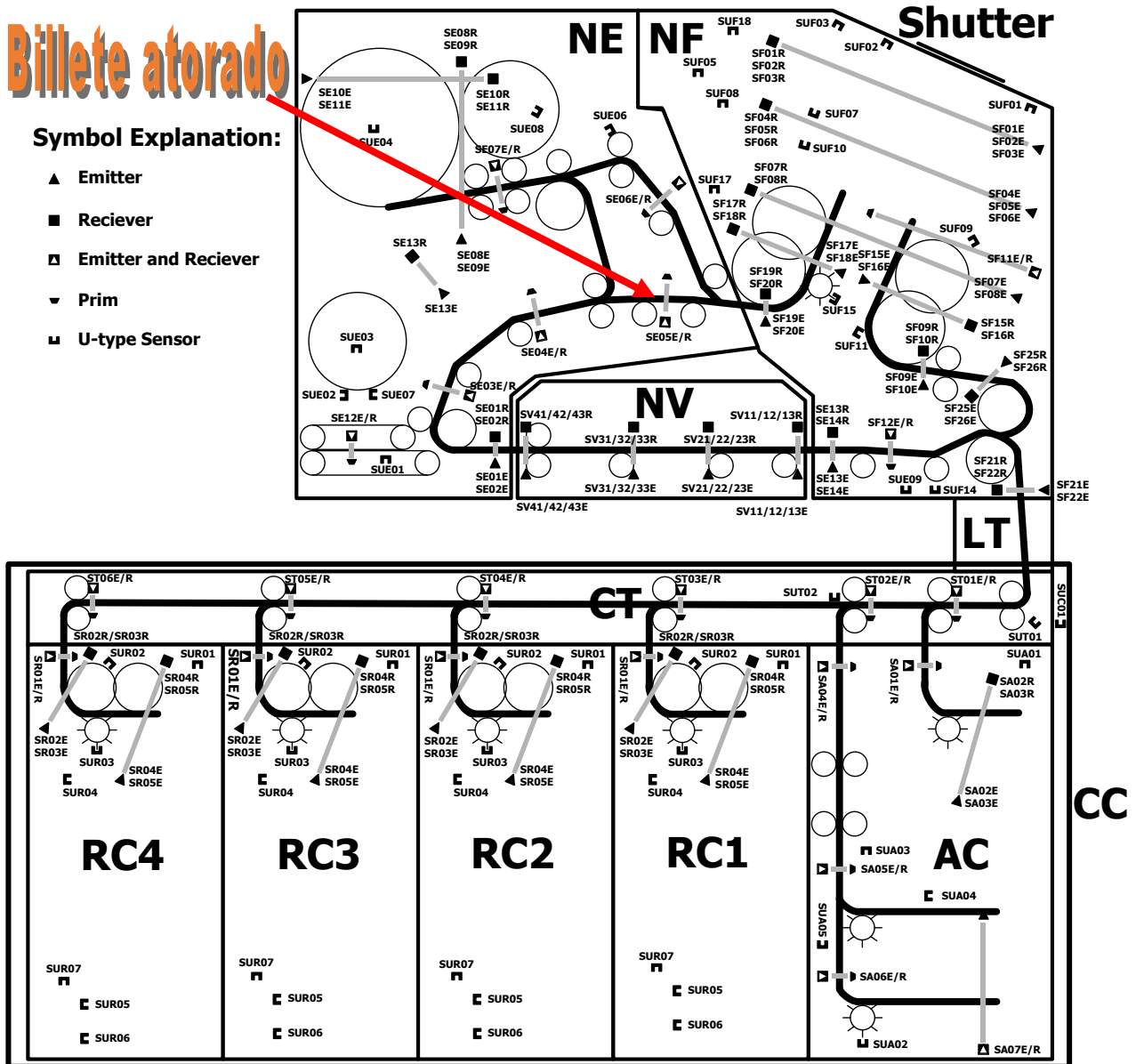

Figure 4.4.1   Layout of sensors of the CRM9250 cash recycling module

Table 4.4.1   List of sensors of the CRM9250 cash recycling module

Code	Type	Position	Description	Function	Initial status	Mode check	Light adjusting	Status definition	Remarks
SF01	**Thru-beam**	**NF**	Sensor (left) for the notes status in the upper part of the NF note port	Detect the status of the left notes in upper part of the NF note port	**Unblocked**	√	√		
SF02	**Thru-beam**	**NF**	Sensor (middle) for the notes status in the upper part of the NF note outlet	Detect the status of the middle notes in the upper part of the NF note port	**Lighted**	√	√		
SF03	**Thru-beam**	**NF**	Sensor (right) for the notes status in the upper part of the NF note outlet	Detect the status of the right notes in the upper part of the NF note port	**Unblocked**	√	√		
SF04	**Thru-beam**	**NF**	Sensor (left) for the notes status in the middle part of the NF note port	Detect the status of the left notes in the middle part of the NF note port	**Unblocked**	√	√		
SF05	**Thru-beam**	**NF**	Sensor (middle) for the notes status in the middle part of the NF note port	Detect the status of the middle notes in the middle part of the NF note port	**Unblocked**	√	√		
SF06	**Thru-beam**	**NF**	Sensor (right) for the notes status in the middle part of the NF note port	Detect the status of the right notes in the middle part of the NF note port	**Unblocked**	√	√		
SF07	**Thru-beam**	**NF**	Sensor (left) for the notes status in the lower part of the NF note port	Detect the status of the left notes in the lower part of the NF note port	**Unblocked**	√	√		
SF08	**Thru-beam**	**NF**	Sensor (right) for the notes status in the lower part of the NF note port	Detect the status sensor (right) of the notes in the lower part of the NF note port	**Unblocked**	√	√		

SF09	Thru-beam	NF	Sensor for the notes status at the NF transport inlet	Detect the status of the notes at the NF transport inlet.	Unblocked	√	√		
SF10	Thru-beam	NF	Sensor for the notes status at the NF transport inlet	Detect the status of the notes at the NF transport inlet.	Unblocked	√	√		
SF11	Thru-beam	NF	Sensor for the notes status in the lower feeding port of NF	Detect the status of the notes in the lower feeding port of NF.	Unblocked	√	√		By prism
SF12	Thru-beam	NF	Sensor for the notes status in the NF transport	Detect the Sensor for the notes status in the NF transport	Unblocked	√	√		By prism
SF13	Thru-beam	NF	Sensor for the notes status in the NF transport (before NV)	Detect the status of the notes in the NF transport (before NV)	Unblocked	√	√		
SF14	Thru-beam	NF	Sensor for the notes status in the NF transport (before NV)	Detect the status of the notes in the NF transport (before NV)	Unblocked	√	√		
SF15	Thru-beam	NF	Sensor for the notes status at the inlet of the lower feeding port of NF	Detect the status of the notes at the inlet of the lower feeding port of NF.	Unblocked	√	√		
SF16	Thru-beam	NF	Sensor for the notes status at the inlet of the lower feeding port of NF	Detect the status of the notes at the inlet of the lower feeding port of NF.	Unblocked	√	√		
SF17	Thru-beam	NF	Sensor for the notes status at the inlet of the upper feeding port of NF	Detect the status of the notes at the inlet of the upper feeding port of NF.	Unblocked	√	√		
SF18	Thru-beam	NF	Sensor for the notes status at the inlet of the upper feeding port of NF	Detect the status of the notes at the inlet of the upper feeding port of NF.	Unblocked	√	√		
SF19	Thru-beam	NF	Sensor for the notes status in the NF transport (at	Detect the status of the notes in the NF transport (at the	Unblocked	√	√		

			the note outlet)	note outlet)					
SF20	**Thru-beam**	**NF**	Sensor for the notes status in the NF transport (at the note outlet)	Detect the status of the notes in the NF transport (at the note outlet)	**Unblocked**	√	√		
SF21	**Thru-beam**	**NF**	LT note status sensor	Detect the status of the notes in the LT	**Unblocked**	√	√		
SF22	**Thru-beam**	**NF**	LT note status sensor	Detect the status of the notes in the LT	**Unblocked**	√	√		
SF23	**Thru-beam**	**NF**							Reserved
SF24	**Thru-beam**	**NF**							Reserved
SF25	**Thru-beam**	**NF**	Sensor for the notes status in the NF transport	Detect the status of the notes in the NF transport	**Unblocked**	√	√		
SF26	**Thru-beam**	**NF**	Sensor for the notes status in the NF transport	Detect the status of the notes in the NF transport	**Unblocked**	√	√		
SUF01	**U-shaped**	**NF**	Shutter closing status sensor	Detect the shutter closing status	**Unblocked**	√		Unblocked: The shutter is closed. Blocked: The shutter is opened.	
SUF02	**U-shaped**	**NF**	Shutter opening status sensor	Detect the shutter opening status	**Unblocked**	√		Unblocked: The shutter is closed. Blocked: The shutter is opened.	
SUF03	**U-shaped**	**NF**	Shutter latch position sensor	Detect the position of the shutter latch	**Unblocked**	√		Unblocked: The latch is closed. Blocked: The latch is opened.	
SUF04	**U-shaped**	**NF**							Reserved
SUF05	**U-shaped**	**NF**	Stack rubber position sensor	Detect the position of the stack rubber	**Unblocked**	√		Blocked: reset position	
SUF06	**U-shaped**	**NF**							Reserved
SUF07	**U-shaped**	**NF**	Reset position sensor of the top plate	Detect the reset position of the top plate	**Unblocked**	√		Blocked: The top plate is	

								reset.	
SUF08	**U-shaped**	**NF**	Stack rubber position sensor	Detect the position of the stack rubber	**Blocked**	√		Blocked: stack position	
SUF09	**U-shaped**	**NF**	Sensor indicating whether the low pressure plate is pressing properly	Detect whether the low pressure plate is properly pressing.	**Unblocked**	√		Blocked: properly pressing	
SUF10	**U-shaped**	**NF**	Sensor indicating whether the up pressure plate is properly pressing	Detect whether the up pressure plate is properly pressing.	**Unblocked**	√		Blocked: properly pressing	
SUF11	**U-shaped**	**NF**	Phase sensor of the lower feeder roller of NF	Detect the motor phase of the lower feeder roller of NF	**Unblocked/blocked**	√			
SUF12	**U-shaped**	**NF**							Reserved
SUF13	**U-shaped**	**NF**							Reserved
SUF14	**U-shaped**	**NF**	PF02 tension cushion status sensor	Detect the status of the PF02 tension cushion	**Blocked**	√		Unblocked: connected with the deposit transport Blocked: connected with the counting transport	
SUF15	**U-shaped**	**NF**	Sheet roller phase sensor of the upper feeder roller of NF	Detect the sheet roller phase of the upper feeder roller of NF	**Unblocked**	√			
SUF16	**U-shaped**	**NF**							Reserved
SUF17	**U-shaped**	**NF**	Deposit position sensor of the low pressure plate of NF	Detect the deposit position of the lower pressure plate of NF	**Unblocked**	√		Blocked: The low pressure plate reaches the bottom	
SUF18	**U-shaped**	**NF**	Deposit position sensor of the top plate	Detect the deposit position of the top plate	**Unblocked**	√		Blocked: The top plate is reset.	
SE01	**Thru-beam**	**NE**	Sensor for the notes status in the transport	Detect the status of the notes in the	**Unblocked**	√	√		

			(after NV)	transport (after NV)					
SE02	Thru-beam	NE	Sensor for the notes status in the transport (after NV)	Detect the status of the notes in the transport (after NV)	Unblocked	√	√		
SE03	Thru-beam	NE	Sensor for the notes status in the transport	Detect the status of the notes in the transport	Unblocked	√	√		By prism
SE04	Thru-beam	NE	Sensor for the notes status in the transport	Detect the status of the notes in the transport	Unblocked	√	√		By prism
SE05	Thru-beam	NE	Sensor for the notes status in the transport	Detect the status of the notes in the transport	Unblocked	√	√		By prism
SE06	Thru-beam	NE	Sensor for the notes status in the transport	Detect the status of the notes in the transport	Unblocked	√	√		By prism
SE07	Thru-beam	NE	Sensor for the notes status in the transport	Detect the status of the notes in the transport	Unblocked	√	√		By prism
SE08	Thru-beam	NE	Sensor for the notes status in the transport (enter NE)	Detect the status of the notes at the joint of the large reel and the transport	Unblocked	√	√		
SE09	Thru-beam	NE	Sensor for the notes status in the transport (enter NE)	Detect the status of the notes at the joint of the large reel and the transport	Unblocked	√	√		
SE10	Thru-beam	NE	Sensor for the notes status in the large reel	Detect the status of the notes in the large reel	Unblocked	√	√		
SE11	Thru-beam	NE	Sensor for the notes status in the large reel	Detect the status of the notes in the large reel	Unblocked	√	√		
SE12	Thru-beam	NE	Sensor for the notes status in the binding transport	Detect the status of the notes in the binding transport	Unblocked				Standby
SE13	Thru-beam	NE	Reset position sensor of the tape	Detect the reset position of the tape	Unblocked	√	√		
SUE01	U-shaped	NE							Reserved

SUE02	U-shaped	NE	Sensor detecting whether the large reel is full of notes	Detect whether the large reel is full of notes	Unblocked	√		Blocked: The large reel is full.	
SUE03	U-shaped	NE	Phase sensor of the motor of the lower small reel	Detect the motor phase of the lower small reel	Unblocked/blocked	√			
SUE04	U-shaped	NE	Phase sensor of the motor of the large reel	Detect the motor phase of the large reel	Unblocked/blocked	√			
SUE05	U-shaped	NE							Reserved
SUE06	U-shaped	NE	PE02 tension cushion status sensor	Detect the PE02 tension cushion status sensor	Unblocked	√		Unblocked: connected with the deposit transport Blocked: connected with the note return transport	
SUE07	U-shaped	NE	NE main motor failure detection sensor	Detect the failure of the main transport motor of NE	Unblocked/blocked	√			
SUE08	U-shaped	NE	Upper small reel status sensor	Detect the upper small reel failure detection sensor	Unblocked/blocked	√			
SUE09	U-shaped	NE	Sensor detecting whether the up machine unit is in place	Detect whether the up machine unit is in place	Blocked	√		Blocked: The up machine unit is in place.	
SUV01	U-shaped	NV	NV transport status sensor	Detect the opening status of the NV transport					
SV11	Thru-beam	NV	Sensor for the notes status in the CIS1 area	Detect the status of the notes in the CIS1 area	Unblocked				
SV12	Thru-beam	NV	Sensor for the notes status in the CIS1 area	Detect the status of the notes in the CIS1 area	Unblocked				
SV13	Thru-beam	NV	Sensor for the notes status in the CIS1 area	Detect the status of the notes in the	Unblocked				

CIS1 area

SV21	Thru-beam	NV	Sensor for the notes status in the magnetic head area	Detect the status of the notes in the magnetic head area	**Unblocked**				
SV22	Thru-beam	NV	Sensor for the notes status in the magnetic head area	Detect the status of the notes in the magnetic head area	**Unblocked**				
SV23	Thru-beam	NV	Sensor for the notes status in the magnetic head area	Detect the status of the notes in the magnetic head area	**Unblocked**				
SV31	Thru-beam	NV	Sensor for the notes status in the CIS2 area	Detect the status of the notes in the CIS2 area	**Unblocked**				
SV32	Thru-beam	NV	Sensor for the notes status in the CIS2 area	Detect the status of the notes in the CIS2 area	**Unblocked**				
SV33	Thru-beam	NV	Sensor for the notes status in the CIS2 area	Detect the status of the notes in the CIS2 area	**Unblocked**				
SV41	Thru-beam	NV	Sensor for the notes status in the thickness detection area	Detect the status of the notes in the thickness detection area	**Unblocked**				
SV42	Thru-beam	NV	Sensor for the notes status in the thickness detection area	Detect the status of the notes in the thickness detection area	**Unblocked**				
SV43	Thru-beam	NV	Sensor for the notes status in the thickness detection area	Detect the status of the notes in the thickness detection area	**Unblocked**				
ST01	Thru-beam	CT	Sensor for notes status before communication in the A area of AC in the CT transport	Detect the notes status before communication in the A area of AC in the CT transport	**Unblocked**	√	√		
ST02	Thru-beam	CT	Sensor for notes status before commutation in the B/C	Detect notes status before communication in the B/C area of AC in the CT	**Unblocked**	√	√		

			area of AC in the CT transport	transport				
ST03	Thru-beam	CT	Sensor for notes status before commutation in RC1 in the CT transport	Detect the notes status before communication in RC1 in the CT transport	**Unblocked**	√	√	
ST04	Thru-beam	CT	Sensor for notes status before commutation in RC2 in the CT transport	Detect the notes status before commutation in RC2 in the CT transport	**Unblocked**	√	√	
ST05	Thru-beam	CT	Sensor of notes status before commutation in RC3 in the CT transport	Detect the notes status before commutation in RC3 in the CT transport	**Unblocked**	√	√	
ST06	Thru-beam	CT	Sensor for notes status before commutation in RC4 in the CT transport	Detect the notes status before commutation in RC4 in the CT transport	**Unblocked**	√	√	
SUT01	U-shaped	CT	CT transport motor phase sensor	Detect the CT transport motor phase	**Unblocked/blocked**	√		
SUT02	U-shaped	CT	Sensor detecting whether the low machine unit is in place	Detect whether the low machine unit is in place	**Unblocked**	√		Unblocked: The low machine unit is in place.
SUC01	U-shaped	CT	CT transport opening status sensor	Detect the opening status of the CT transport	**Unblocked**	√		Unblocked: The CT transport is closed.
SR01	Thru-beam	RC	Sensor for the notes status at the RC inlet	Detect the status of the notes at the RC inlet.	**Unblocked**	√	√		By prism
SR02	Thru-beam	RC	Sensor for the notes status in the RC transport	Detect the status of the notes in the RC transport	**Unblocked**	√	√	
SR03	Thru-beam	RC	Sensor for the notes status in the RC transport	Detect the status of the notes in the RC transport	**Unblocked**	√	√	
SR04	Thru-beam	RC	RC empty status sensor	Detect the RC empty status	**Unblocked**	√	√	
SR05	Thru-beam	RC	RC empty	Detect the RC	**Unblocked**	√	√	

ID	Type	Area	Name	Function	Status					Notes
			status sensor	empty status						
SUR01	U-shaped	RC	Sensor indicating whether the RC pressure plate is properly pressing	Detect whether the RC pressure plate is properly pressing	**Blocked**	√			Blocked: The pressure plate is properly pressing	
SUR02	U-shaped	RC	RC note feeding motor phase sensor	Detect the RC note feeding motor phase	**Unblocked/blocked**	√				
SUR03	U-shaped	RC	RC sheet roller phase sensor	Detect the RC sheet roller phase	**Unblocked/blocked**	√				
SUR04	U-shaped	RC	RC tension cushion status sensor	Detect the status of the RC tension cushion	**Unblocked**	√				
SUR05	U-shaped	RC	Sensor detecting whether RC is to be full	Detect whether the RC is to be full	**Unblocked**	√			Blocked: RC is to be full.	
SUR06	U-shaped	RC	Sensor detecting whether RC is full	Detect whether RC is full	**Unblocked**	√			Blocked: RC is full.	
SUR07	U-shaped	RC	RC pressure plate phase sensor	Detect the RC pressure plate phase	**Unblocked/blocked**	√				
SA01	Thru-beam	AC	Sensor for the notes status at the inlet of the A area of AC	Detect the status of the notes at the inlet of the A area of AC	**Unblocked**	√	√			By prism
SA02	Thru-beam	AC	Sensor of the initial note stacking position of the AC pressure plate	Detect the initial note stacking position of the AC pressure plate and detect whether the cassette is empty by using SUA01 at the same time.	**Unblocked**	√	√			
SA03	Thru-beam	AC	Sensor of the initial note stacking position of the AC pressure plate	Detect the initial note stacking position of the AC pressure plate and detect whether the cassette is empty by using SUA01 at the same time.	**Unblocked**	√	√			
SA04	Thru-beam	AC	Sensor for the	Detect the	**Unblocked**	√	√			By prism

			notes status at the transport inlet of the B/C area of AC	status of the notes at the transport inlet of the B/C area of AC					
SA05	**Thru-beam**	**AC**	Sensor for notes status before commutation in the B/C area at the B/C transport of AC	Detect the notes status before communication in the B/C area at the B/C transport of AC	**Unblocked**	√	√		By prism
SA06	**Thru-beam**	**AC**	Sensor for the notes status at the inlet of the C area of AC	Detect the status of the notes at the inlet of the C area of AC	**Unblocked**	√	√		By prism
SA07	**Thru-beam**	**AC**	Sensor detecting whether the B/C area of AC is empty	Detect whether the B/C area of AC is empty	**Unblocked**	√	√		By prism
SUA01	**U-shaped**	**AC**	Sensor indicating whether the AC pressure plate is properly pressing	Detect whether the AC pressure plate is properly pressing	**Blocked**	√		Blocked: The pressure plate is properly pressing	
SUA02	**U-shaped**	**AC**	AC transport motor phase sensor	Detect the AC transport motor phase	**Unblocked/blocked**	√			
SUA03	**U-shaped**	**AC**	Sensor detecting whether AC is to be full	Detect whether the AC is to be full	**Unblocked**	√		Blocked: AC is to be full.	
SUA04	**U-shaped**	**AC**	Sensor detecting whether AC is full	Detect whether AC is full	**Unblocked**	√		Blocked: AC is full.	
SUA05	**U-shaped**	**AC**	AC pressure plate motor phase sensor	Detect the AC pressure plate motor phase	**Unblocked/blocked**	√			